DOCUMENT RESUME

ED 480 216 TM 035 189

AUTHOR	Bielick, Stacey; Chapman, Christopher
TITLE	Trends in the Use of School Choice: 1993 to 1999. Statistical Analysis Report.
INSTITUTION	National Center for Education Statistics (ED), Washington, DC.
REPORT NO	NCES-2003-031
ISBN	ISBN-0-16-051443-6
PUB DATE	2003-05-00
NOTE	66p.
AVAILABLE FROM	ED Pubs, P.O. Box 1398, Jessup, MD 20794-1398. Tel: 877-433-7827 (Toll Free); Fax: 301-470-1244; e-mail: edpubs@inet.ed.gov.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC03 Plus Postage.
DESCRIPTORS	Charter Schools; *Educational Trends; *Elementary Secondary Education; Home Schooling; National Surveys; *Parent Attitudes; Private Schools; *School Choice; Trend Analysis
IDENTIFIERS	*National Household Education Survey

ABSTRACT

The National Household Education Surveys Program (NHES) provides a comprehensive set of information that may be used to estimate the use of school choice in the United States. In this country, school choice is primarily comprised of programs that allow students to attend any public school within or outside of their local school district, a magnet or charter school, a private school, or homeschool. This report examines data from three administrations or the NHES (1993, 1996, and 1999) in which children's parents were asked if their children attended their assigned public schools, public schools that they had chosen, private schools that are church-related, or private schools that are not church-related, and about their satisfaction and involvement within these schools. The report provides information about trends in the use and users of public schools of choice and private schools, and outcomes of these choices: parent satisfaction and involvement, and student plans for postsecondary education. The report also provides a brief analysis of homeschooled students. This report cannot answer questions about the availability of public school choice or other school choice programs. The report shows that the percentage of children enrolled in public, assigned schools for grades 1 through 12 decreased from 80% in 1993 to 76% in 1999. The decrease in public, assigned school enrollment was almost completely offset by an increase from 11 to 14% in public, chosen school enrollment. Enrollment in private, church-related schools remained relatively stable at 7 to 8% between 1993 and 1999, and enrollment in private, not church-related schools was about 2% in each year. An appendix contains tables of numbers. (Contains 4 figures, 11 tables, and 42 references.) (Author/SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

TM TMTR 0205

ED 480 216

NCES
National Center for Education Statistics

NHES
National Household Education Surveys Program

U.S. Department of Education
Institute of Education Sciences
NCES 2003-031

Trends in the Use of School Choice

1993 to 1999

Statistical Analysis Report

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

TM035189

BEST COPY AVAILABLE

NCES
National Center for Education Statistics

NHES
National Household Education Surveys Program

U.S. Department of Education
Institute of Education Sciences
NCES 2003-031

Trends in the Use of School Choice 1993 to 1999

Statistical Analysis Report

May 2003

Stacey Bielick
Education Statistics Services Institute

Christopher Chapman
National Center for Education Statistics

BEST COPY AVAILABLE

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

ISBN 0-16-051443-6

U.S. Department of Education
Rod Paige
Secretary

Institute of Education Sciences
Grover J. Whitehurst
Director

National Center for Education Statistics
Val Plisko
Associate Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics
Institute of Education Sciences
U.S. Department of Education
1990 K Street NW
Washington, DC 20006–5651

May 2003

The NCES World Wide Web Home Page address is *http://nces.ed.gov*
The NCES World Wide Web Electronic Catalog is: *http://nces.ed.gov/pubsearch*

Suggested Citation

U.S. Department of Education. National Center for Education Statistics. *Trends in the Use of School Choice: 1993 to 1999*, (NCES 2003-031), by Stacey Bielick and Christopher Chapman. Washington, DC: 2003.

For ordering information on this report, write:
U.S. Department of Education
ED Pubs
P.O. Box 1398
Jessup, MD 20794–1398

Or call toll free 1–877–4ED–Pubs

Content Contact:
Christopher Chapman
(202) 502–7414
Chris.Chapman@ed.gov

Acknowledgments

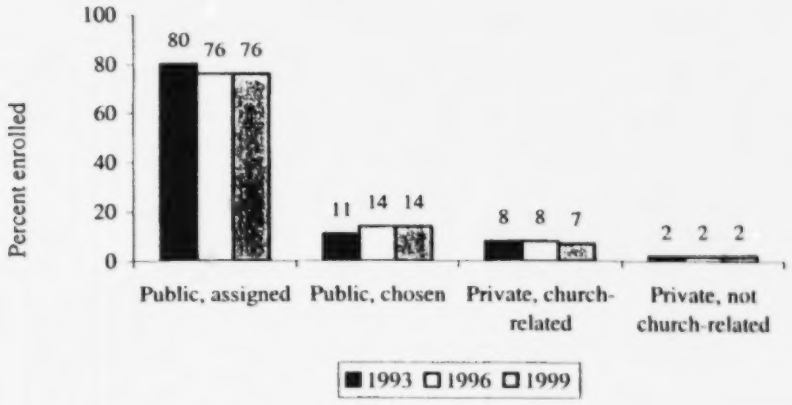
The authors wish to thank Eric Hanushek of the Hoover Institution at Stanford University, John Fitz of Cardiff University, and Jerry West, Val Plisko, Marilyn Seastrom, William Hussar, Bruce Taylor, Arnold Goldstein, and Stephen P. Broughman of the National Center for Education Statistics (NCES) for their thoughtful and thorough reviews. We also appreciate comments provided by the program offices within the U.S. Department of Education. Sandra Eyster, Jennifer Sable, and Nikkita Willis of the Education Statistics Services Institute (ESSI) provided valuable assistance in all aspects of the National Household Education Surveys Program (NHES), including the development of this report. Westat Incorporated collected and documented the NHES data. We would also like to thank the approximately 50,000 parents who completed the interviews upon which this report is based.

Executive Summary

The National Household Education Surveys Program (NHES) provides a comprehensive set of information that may be used to estimate the use of school choice in the United States. Within the United States, school choice is primarily comprised of programs that allow students to attend any public school within or outside of their local school district, a magnet or charter school, a private school, or homeschool. This report examines data from three administrations of the NHES (1993, 1996, and 1999) in which children's parents were asked if their children attended their assigned public schools, public schools that they had chosen, private schools that are church-related, or private schools that are not church-related, and about their satisfaction and involvement with those schools. The report provides information about trends in the use and users of public schools of choice and private schools, and outcomes of these choices—parent satisfaction and involvement, and students' plans for postsecondary education. The report also provides a brief analysis of homeschooled students. This report cannot answer questions about the availability of public school choice or other school choice programs.

As figure A below shows, the percentage of children enrolled in public, assigned schools for 1st through 12th grades decreased from 80 percent in 1993 to 76 percent in 1999. The decrease in public, assigned school enrollment was almost completely offset by an increase from 11 to 14 percent in public, chosen school enrollment. Enrollment in private, church-related schools remained relatively stable at 7–8 percent between 1993 and 1999 and enrollment in private, not church-related schools was about 2 percent in each year.

Figure A.— Percentage of students enrolled in grades 1–12 by public and private school type: 1993, 1996, and 1999



NOTE: Includes homeschooled students enrolled in public or private schools for 9 or more hours per week.
SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and the Parent Survey of the NHES, 1999.

Characteristics of students in public, assigned and chosen schools and private schools

The trend away from public, assigned school enrollment and toward public, chosen school enrollment between 1993 and 1999 was most evident among students from low-income households.[1] Between 1993 and 1999, the proportion of students whose household income was $10,000 or less who were in public, assigned schools fell from 83 percent to 74 percent (this decrease was mostly offset by an increase in public, chosen school enrollment). In contrast, over the same period, the proportion of students from households with incomes of more than $75,000 attending public, assigned schools remained relatively steady at around 70 percent. No differences were detected in the proportion of students in this high income group attending

[1] Income data are categorical and have not been adjusted for inflation. Hence, they do not reflect the same purchasing power for the three years. Independent analyses not shown here indicate that the patterns found for unadjusted income are the same as those found using a measure of poverty, which adjusts for inflation.

private schools between 1993 and 1999. Students from families with higher incomes were overall more likely to attend private schools than were students from families with lower incomes.

Other student and family characteristics were also associated with school choice. In each of these years, Black students had a higher rate of enrollment in public, chosen schools than did White or Hispanic students in the 1st through 12th grades. Generally, a greater percentage of 1st through 12th grade students living in urban areas attended public, chosen and private schools than did students living outside urban areas.

In all-three survey years, a higher percentage of 1st through 12th grade students living in two-parent households were enrolled in private, church-related schools than were students living in one-parent households. Students whose parents possessed at least a bachelor's degree had a higher rate of enrollment in private schools, both church-related and not church-related, than students whose parents obtained at most a high school diploma, GED or less. First through 12th grade students with disabilities attended private, church-related schools at a lower rate than did students without disabilities. There were no differences detected between students with and without disabilities for other types of schools.

Characteristics of Homeschooled Children

Homeschoolers are not mirror images of students in either public or private schools, differing from both on a number of characteristics. Homeschoolers differed from students in public schools in that their parents tended to be better educated. Homeschoolers were more likely to be White and to live in two-parent households than were students in assigned or chosen schools.

Homeschoolers differed from private school students in fewer ways than they differed from public school students. Homeschoolers were less likely than private school students to live in households with annual incomes over $75,000. They were also less likely to live in the Northeast and inside urban areas and more likely to live in rural areas.

Differences in parent satisfaction and involvement with their children's schools[2]

Choice makes a difference in parent satisfaction. Parents whose children attended either public, chosen schools or private schools were more likely to say they were very satisfied with their children's schools, teachers, academic standards, and order and discipline than were parents whose children attended public, assigned schools (tables 3 and 6). Parents whose children attended private schools were more involved in activities at their children's schools than were parents whose children attended public, assigned and public, chosen schools (tables 4a, 4b, and 7).

Differences in parents' expectations for their children's postsecondary education

According to parent reports, at least nine out of ten 6th through 12th grade students had plans for postsecondary education after high school regardless of school type. However, more students in private, church-related schools were expected by their parents to graduate from a 4-year college than were public school students (tables 5a and 5b). There were no differences detected in parents' expectations between public, assigned and public, chosen schools.

[2] Please note that questions about satisfaction and parental involvement were asked only of parents of students in grades 3-12 in 1993. For this reason, discussion of satisfaction and involvement is limited to students in grades 3-12.

Contents

Acknowledgments iii

Executive Summary iv

List of Tables ix

List of Figures xi

Introduction 1

Background 4

- Data Sources 9
- Measuring School Choice 10
- Measuring Parent Involvement and Satisfaction, and Student Plans for Postsecondary Education 11

Findings 12

- Student and Household Characteristics by Public and Private School Types 12
- Characteristics of Homeschooled Children 21
- Parent Involvement and Satisfaction, and Student Plans for Postsecondary Education 24
- Multivariate Analysis of Average Parent Satisfaction and Level of Involvement 29

Summary and Conclusions 34

Methodology and Data Reliability 36

References 44

Appendix A

Tables of Numbers 48

List of Tables

Table 1.— Percentage of students enrolled in grades 1–12 by public and private school types, and by student and household characteristics: 1993, 1996, and 1999 15

Table 2.— Percentage of students ages 5–17 enrolled in grades 1–12 by public and private school types and homeschool, by student and household characteristics: 1999 22

Table 3.— Percentage of students in grades 3–12 whose parents were very satisfied with various aspects of their schools by public and private school types: 1993 and 1999 25

Table 4a.— Percentage of students in grades 3–12 whose parents were involved in various ways with their children's schools by public school types: 1993, 1996, and 1999 27

Table 4b.— Percentage of students in grades 3–12 whose parents were involved in various ways with their children's schools by private school types: 1993, 1996, and 1999 27

Table 5a.— Percentage of students in grades 6–12 who plan to attend school after high school as reported by students' parents by public school types: 1993, 1996, 1999 28

Table 5b.— Percentage of students in grades 6–12 who plan to attend school after high school as reported by students' parents by private school types: 1993, 1996, 1999 28

Table 6.— Coefficients from OLS regressions on 3rd through 12th grade students' parents' reports of satisfaction with their children's school characteristics: 1999 31

Table 7.— Coefficients from OLS regressions on 3rd through 12th grade students' parents' involvement in their children's schools: 1999 33

Table A1.— Number of students in grades 1–12 attending public and private schools, by student and household characteristics: 1993, 1996, and 1999 49

Table A2.— Number of students in grades 3–12 attending public and private schools, by school type: 1993, 1996, and 1999 50

Table A3.— Number of students in grades 1–12, ages 5–17, attending public and private schools and homeschool by student and household characteristics: 1999 51

Table A4.— Number of students in grades 6–12 attending public and private schools, by school type: 1993, 1996, and 1999 52

List of Figures

Figure A— Percentage of students enrolled in grades 1–12 by public and private school type: 1993, 1996, and 1999 v

Figure 1.— Percentage of students enrolled in grades 1–12 by public and private school type: 1993, 1996, and 1999 12

Figure 2.— Percentage of students enrolled grades 1–12 in public, assigned and public, chosen schools by lowest and highest household income groups ($10,000 or less and more than $75,000): 1993, 1996, and 1999 17

Figure 3.— Percentage of students in grades 3–12 whose parents are very satisfied with various aspects of the students' schools by public and private school type: 1999 26

Introduction

School choice is a school reform initiative that, since the 1980s, has moved from a theoretical argument for changes in the public education system to a widespread reform movement (U.S Department of Education 1995, Cookson 1994). Within the United States, school choice is primarily comprised of programs that allow students to attend any public school within or outside of their local school district, a magnet or charter school, a private school, or homeschool. Before the late 1980s, school choice was almost synonymous with private school attendance (Choy 1997). However, the availability of public school choice, which generally includes magnet and charter schools and inter and intradistrict school choice, has grown.[3] The number of magnet schools nearly doubled since between the early 1980s and the year 2000 and the number of public charter schools grew from two schools in 1992 to over 1,400 schools in 1999 (Nelson, et al. 2000, Algozzine et al. 1999). In this report, children are considered to be enrolled in schools of choice if they were enrolled in public schools other than their assigned school or in private schools, both church-related and not church-related. Children who were homeschooled and did not attend any public or private school are also examined in a separate analysis.

The increase in public schooling options from which families can choose has been accompanied by an increase in the use of public school choice. Data in this report show that the percentage of students enrolled in public, chosen schools, meaning inter- and intradistrict schools of choice or public magnet or charter schools, increased from 11 percent in 1993 to 14 percent in 1999. Conversely, enrollment in public, assigned schools, meaning schools to which students are assigned based primarily on their residence, decreased from 80 percent in 1993 to 76 percent in 1999. Enrollment in private schools remained stable at 7 or 8 percent for private, church-related schools and at 2 percent for private, not church-related schools.

[3] Interdistrict school choice allows students to enroll in schools outside of their local district. Intradistrict choice allows students to enroll in any school within their local district.

This report examines differences in students who attend public schools, both assigned and chosen; private schools, both church-related and not church-related;[4] and homeschooling, by considering the following research questions:

- What was the trend in the use of public schools, both assigned and chosen, and private schools, both church-related and not church-related, between 1993 and 1999?
- What were some of the characteristics of the chosen and assigned schools attended by elementary and secondary students, and how have they changed over time?
- What were the individual and family characteristics of students who attended the various types of chosen schools and assigned schools and how have those characteristics changed over time?
- What were the characteristics of homeschooled students compared to students in public and private schools?
- What was the relationship between the various types of chosen and assigned schools students were attending and parent satisfaction and involvement with those schools?
- What was the relationship between the kind of school attended by students and the educational expectations their parents had for them?

The data used in this report are from three administrations—1993, 1996, and 1999—of the National Household Education Surveys Program (NHES). In each survey year, parents were asked whether or not their children attended a public or private school, if the public school was a regularly assigned school or a school parents chose, and whether or not a private school was church-related. Parents were asked about their involvement with their children's schools, including attending meetings, parent-teacher conferences, school events such as plays or sports events, or volunteering at the school, and their satisfaction with their children's school, teachers, order and discipline, and academic standards. Additionally, parents were asked if they thought their children would attend school after high school and if they thought they would graduate from a 4-year college. An analysis of homeschooled children was also conducted. Because comparable

[4] In some cases, the public, assigned school could also be the school the parent chose and the public, chosen school could also be the assigned school. Responses were coded into assigned or chosen based on the parents' response. No definitions were provided and no explicit follow-ups were used. The question wording used in the 1996 and 1999 NHES, "Is the school church-related or not church-related?" was changed from the 1993 NHES question "Is the school affiliated with a religion?" to reflect the wording used in the questionnaire for the 1997 October supplement to the Current Population Survey.

data were not available from the 1993 and 1996 collections, the homeschool analysis focuses on 1999.

The analysis of school choice presented in this report uses data for students enrolled in 1st through 12th grades.[5] The NHES surveys used in the analysis are the School Readiness Survey of 1993 (SR-NHES:1993) combined with the School Safety & Discipline Survey of 1993 (SS&D-NHES:1993), the Parent & Family Involvement Survey of 1996 (PFI-NHES:1996), and the Parent Survey of 1999 (Parent-NHES:1999).

[5] Kindergarten attendance is not mandatory in all states, therefore students in kindergarten were excluded from the analysis. Also, the analysis of parent satisfaction and involvement examines children in grades 3–12 only and the analysis of postsecondary education examines children in grades 6–12 only because of data availability.

Background

Despite the continued debate about school choice, various local governments and states have implemented a range of school choice programs, both public and private. The types of school choice programs implemented have ranged from allowing students to attend any school within their local public school district to providing them with some public funds, often referred to as school vouchers, to attend a private school of their choice. In addition, some parents choose to school their children at home. For policymakers, educators, and parents, the school choice movement has raised social and economic questions about how various types of choice options may affect equity in elementary and secondary education compared to the existing system. Policymakers on both sides of the debate over the implications of alternatives to the traditional public school system are concerned about how school choice options will ensure that all students, regardless of their individual and family characteristics or ability, have access to quality schooling and to information about their options (Archibald 1996). A number of factors central to the debate over school choice are discussed below.[6]

Control of school, region, district size

Since states and local governments are primarily responsible for implementing education legislation and for funding their public schools, the types of school choice available to families vary from state to state and locality to locality.[7] The variation in state legislation also creates regional variation in the availability of school choice. During the 1999–2000 school year, 71 percent of school districts in the West, 63 percent in the Midwest, 44 percent in the South and 19 percent in the Northeast allowed for intradistrict or interdistrict school choice options.[8] Charter school options were not as geographically widespread.[9] In 1999, 50 percent of charter schools

[6] The reader should note that choice of residence is often included in discussions of school choice, however, the data examined here do not allow for analysis of parents' choice of residence.
[7] State, local, and intermediate governments financed over 90 percent of public education in 1993, 1996, and 1999 with state and local/intermediate governments contributing almost equally (U.S. Department of Education 2000b, U.S. Department of Education 2000c).
[8] Unpublished estimates from the 1999–2000 Schools and Staffing Survey, "School District Survey."
[9] Charter schools are defined in the glossary on the U.S. Department of Education website for *No Child Left Behind* as "independent public schools designed and operated by educators, parents, community leaders, educational entrepreneurs, and others. They are sponsored by designated local or state educational
(Footnotes continued on next page)

were located in only four states—Arizona, California, Michigan, and Texas (Nelson, et. al. 2000). Publicly funded school voucher programs are even more rare. Currently, there are six school voucher programs in the United States—in Colorado, Florida, Maine, and Vermont, and in Milwaukee, Wisconsin and Cleveland, Ohio (Washington Post 2003, Schulte 2002). Additionally, state and local laws governing homeschooling vary widely (Klicka 2001).

Apart from differences across state and local governments, the types of school choice available to families are influenced by a number of other factors. District size is one such factor. Students living in large districts with more schools have more opportunity for public school choice within districts (intradistrict choice) while students living in areas with few schools per district may only be able to choose a different public school by enrolling in schools in other districts (interdistrict choice). For example, in 1993-94, one-third of school districts with 10,000 or more students had intradistrict choice compared to 9 percent of school districts with less than 1,000 students (U.S. Department of Education 1996a).

Family structure, parents' education, household income

While public schools are supported by state and local government funds, private schools have traditionally been supported by tuition and fees or private endowments and donations. The cost of sending children to a private school tends to limit private education to children from families who can afford such schools. Families with more highly educated parents and families with both parents living in the household generally earn higher incomes than other families (U.S. Department of Education 1999). Children from these higher educated and higher income families are more likely than other children to attend private schools (U.S Department of Education 1995).

Race/ethnicity

Data from the 1993 and 1999 October supplement to the Current Population Survey (CPS) show that students who attend publicly controlled schools are more racially and ethnically

---

organizations, who monitor their quality and effectiveness but allow them to operate outside of the traditional system of public schools." Available http://www.nclb.org/start/glossary/index.html.

diverse than students who attend privately controlled schools.[10] The data show that in both years, 34–38 percent of students enrolled in public schools for elementary and high school grades were non-White compared to 21 percent of students enrolled in private schools.[11]

Irrespective of how public and private schools compare to one another in racial and ethnic diversity, public school choice has been used by many school districts, especially those in large cities, to foster racial integration in the public school system.[12] Magnet schools, for example, are typically established in urban school districts with enrollments of greater than 10,000 students (Goldring and Smrekar 2000). In case studies of Cincinnati and St. Louis in the 1993–94 school year, the racial balance of the magnet schools studied ranged from 57 to 46 percent Black students in Cincinatti and 62 to 51 percent Black students in St. Louis with White students making up most of the difference. In nonmagnet schools in Cincinnati, the percentage of Black students ranged from 85 to 30 percent Black, and in St. Louis, from 88 to 26 percent (Goldring and Smrekar 2000). In Cincinnati, 66 percent of students enrolled in the district were Black and in St. Louis, 78 percent of students enrolled were Black.

Disability status

Because private schools have not historically depended on public funds, they are generally not required to follow state and federal regulations about admissions and curricula. While states have the power to regulate private schools with "reasonable regulations," most states make exceptions for religious schools based on the First Amendment's guarantee of free exercise of religion (U.S. Department of Education 2000a). Students with disabilities are provided appropriate educational services under the 1975 Individuals with Disabilities Education Act (IDEA) as well as the Vocational Rehabilitation Act of 1973 and the 1990 Americans with Disabilities Act. These federal laws require public schools to provide a free appropriate public

[10] The October supplements to the CPS are used to estimate school enrollment figures in the United States. To assure that CPS estimates were as comparable as possible to the 1993 and 1999 end points used in this report, the 1993 and 1999 CPS data were used.

[11] U.S. Census Bureau, Current Population Survey (June 1, 2001 Internet release date) Historical Tables, Table A-1. School Enrollment of the Population 3 to 34 Years Old, by Level and Control of School, Race, and Hispanic Origin: October 1955 to 2000.

[12] Desegregation plans have also used strategies whereby students are assigned to particular schools to achieve more racially integrated schools.

education for students with disabilities (Ladd and Hansen, eds. 1999). These legal requirements might suggest that a disproportionate number of disabled students will be found in public schools. If a public school is unable to provide a student with a disability with a free appropriate public education through its own programs, it can place that student at a private school for purposes of providing that child an appropriate education. In this situation, the child's program is provided at public expense and at no cost to the parents. If a public school district has made a free appropriate public education available to a child, and a parent places their child at a private school, the public school district is not required to pay for the child's education at the private school.[13] However, students with disabilities or teachers at private schools may be able to participate on an equitable basis in federally-assisted programs or services in connection with their private school placements (U.S. Department of Education 2000a).

Parent Involvement and Satisfaction, and Plans for Postsecondary Education

Three outcomes to consider when studying school choice are parents' involvement with their children's school, parents' satisfaction with the schools and students' plans for postsecondary education.[14] These outcomes are discussed below.

Parent involvement

The debate surrounding school choice considers how choice programs may or may not benefit students' academic performance. Previous research has suggested that one key element to high academic performance is parent involvement in their children's education (Nord, Brimhall & West 1997). Parents are generally more involved with private schools than with public schools (Hausman & Goldring 2000, Algozzine et.al. 1999, Nord, Brimhall & West 1997, Vaden-Kiernan & Chandler 1996) and parents who have more choices in schools have been found to be more involved (Hoxby 1998). It is important to consider that the relationship between private schools and parent involvement may also be mediated by the characteristics of parents who use private schools. For example, parent involvement in schools has been shown to increase for two-parent

[13] Some private schools specialize in education for students with disabilities.
[14] Student achievement is another important outcome measure for comparing school types; however, NHES surveys are not well suited to this type of research because there are no direct measures of student achievement on NHES surveys.

families, and parents with more education. These families and parents are most likely to place their children in private schools (Nord, Brimhall & West 1997). In addition, private schools often require parents to be active in school functions and activities, which may contribute to the higher involvement of parents of students in private schools (Nord, Brimhall & West 1997).

Research suggests that parents are more involved when their children attend religious schools (Coleman & Hoffer in Arum & Beattie, eds. 2000). One of the reasons thought to contribute to high parent involvement in religious schools is that they foster strong social networks among the families whose children attend them. Coleman and others argue that social networks are an important resource, similar to resources like income or parent's education, that helps parents to be more involved in their children's schools (Nord, Brimhall & West 1997, Coleman & Hoffer 1987).

Parent satisfaction

In addition to being more involved, parents of children who attend private schools are generally more satisfied with their children's schools than are parents of children who attend public schools (Hausman & Goldring 2000, Algozzine et al. 1999). That parents who chose private schools for their children are more satisfied with those schools than other parents, may be associated with one or all of several factors. First, parents may be more satisfied because they feel students are generally better prepared academically in private schools than public schools (Choy 1997). Second, satisfaction may simply have to do with having the opportunity to make a choice. Third, satisfaction could come from being able to choose a school that matches family needs and interests. Fourth, parents' choice may color their perception of the schools they choose for their children. Lastly, parents may feel empowered by having the option to pull their children out of schools they have chosen and may exercise greater influence over school practices and policies because of their ability to leave if the school does not meet their needs (Hausman & Goldring 2000, Ogawa & Dutton 1997, Erickson 1982).

Plans for postecondary education

Data show that students who expect to graduate from a four-year college are much more likely to do so than students with lower postsecondary expectations (U.S. Department of

Education 2001). Prior research also shows that private school students are more likely to be enrolled in a postsecondary institution a year after graduating from high school than are public school students (U.S. Department of Education 1996b). Apart from student expectations, parental expectations about their children's college attendance and college completion have also been shown to be positively related to whether their children attend and complete college (Ingels et al. 2002). The analysis in this report studies the possible relationships between the type of school a child attends and parental expectations for that child's postsecondary education.

Data Sources

This report is based on data from the 1993, 1996, and 1999 National Household Education Surveys Program (NHES) sponsored by the U.S. Department of Education, National Center for Education Statistics. In each survey year, parents were asked whether or not their children attended a public or private school, if the public school was a regularly assigned school or a school parents chose, and whether or not a private school was church-related. These data provide a basis for examining further some of the public and private school differences noted above and for extending the analysis to include comparisons with public, chosen schools. Specifically, the data used in the analysis are from the 1993 School Readiness Survey and the 1993 School Safety & Discipline Survey, the 1996 Parent & Family Involvement Survey, and the 1999 Parent Survey. Each NHES survey uses telephone interviews of U.S. households. Full NHES samples range in size from 45,000 to 60,000 households.[15] When appropriately weighted,

[15] For more information about the specific survey years, see the *Survey Methodology and Technical Notes* section of this report or the *Data File Users Manuals* for the four surveys used in this report. These manuals are cited below and are available on-line at http://nces.ed.gov/nhes. U.S. Department of Education. National Center for Education Statistics. *National Household Education Survey of 1993: School Readiness Data File User's Manual*, NCES 94–193, by J. Michael Brick, Mary Collins, Mary Jo Nolin, Peter C. Ha, Mary Levinsohn, and Kathryn Chandler. Washington, DC: 1994. U.S. Department of Education. National Center for Education Statistics. *National Household Education Survey of 1993: School Safety and Discipline Data File User's Manual*, NCES 94–218, by J. Michael Brick, Mary Collins, Mary Jo Nolin, Peter C. Ha, Mary Levinsohn, and Kathryn Chandler. Washington, DC: 1994. U.S. Department of Education. National Center for Education Statistics. *National Household Education Survey of 1996: Data File User's Manual, Volume I* and *Volume III: Parent and Family Involvement in Education and Civic Involvement-Parent Data File*, NCES 97–423, by Mary Collins, J. Michael Brick, Mary Jo Nolin, Nancy Vaden-Kiernan, Susan Gilmore, Kathryn Chandler, and Chris Chapman. Washington, DC: 1997. U.S. Department of Education. National Center for Education Statistics. *National Household Education Survey of 1999: Data File User's Manual, Volume I* and *Volume II: Parent InterviewData File*, NCES 2000–081, by Mary Jo Nolin, Jill Montaquila, Jean Lennon, Brian Kleiner, Kwang Kim, Christopher Chapman, Kathryn Chandler, Sean Creighton, and Stacey Bielick. Washington, DC: 1997.

each sample is nationally representative of all civilian, non-institutionalized persons in the 50 states and the District of Columbia. The samples were selected using random-digit-dialing (RDD) methods, and the data were collected using computer-assisted telephone interviewing (CATI) technology.

This report uses data reported by parents about children in grades 1 through 12. Data were collected about 16,957 children in 1993, 16,145 children in 1996, and 15,939 children in 1999. The unit of analysis in the NHES parent interviews is the child and not the parent or guardian. All percentages referenced in this report are the percentage of children whose parents or guardians reported particular information about them.

Measuring School Choice

Although school choice programs come in many different forms, for purposes of this report school choice is defined as enrollment in public, chosen schools or enrollment in private schools, regardless of the type of public, chosen school or whether the student received a voucher to attend private school. In addition, part of the analysis also considers homeschooling as a form of school choice. Private schools were split into private, church-related schools and private, not church-related schools. The final school type considered is public, assigned schools. Although the assigned school could also be the school of choice, data from the NHES surveys did not consistently ask parents to make that distinction.[16]

Because the NHES surveys are surveys of households and not schools, data from the collections cannot measure the availability of school choice programs. Information about school choice availability can be found in other school-based data collections such as the 1993-1994 or 1999-2000 Schools and Staffing Survey (U.S. Department of Education, National Center for Education Statistics).

[16] In the NHES:1993, less than 2 percent of parents of students volunteered that their assigned school was their school of choice. Because these parents may have moved into an area so that their children could attend a particular school, these cases are considered "chosen" schools in this analysis. These data were not specifically recorded in 1996 or 1999. The discrepancy between the survey years likely has little effect on the results. Because these 1993 cases were coded as "chosen schools," assigning them elsewhere or excluding them from the analysis would only increase the differences already found in the data.

Measuring Parent Involvement and Satisfaction, and Student Plans for Postsecondary Education

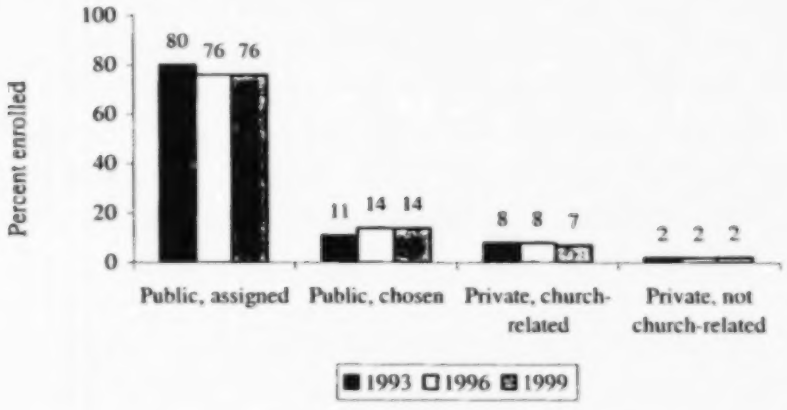
The analysis of parent satisfaction and involvement is based on students in 3rd through 12th grades. Questions on parent satisfaction and involvement were not asked of parents of 1st and 2nd graders in the NHES:1993, therefore the population in the outcomes analysis is limited to grades 3 through 12 to allow for comparison between the survey years. The analysis for students' plans for postsecondary education is limited to parents of students in the 6th through 12th grades. Parents of younger children were not asked about their children's plans for postsecondary education.

The NHES surveys used in this report measure parent satisfaction by asking parents how satisfied they are with four aspects of their children's schools: the school; the teachers; the academic standards; and the order and discipline maintained in the school. Parents are asked to rate their satisfaction as *very satisfied, somewhat satisfied, somewhat dissatisfied,* or *very dissatisfied.* The analysis of parent satisfaction in this report considers parents of children in each school type who were *very satisfied* with each aspect of their children's schools. Parent involvement is measured by a series of questions that ask about parents' attendance at different parent/school activities since the beginning of the school year: a general meeting, such as a PTA meeting; a parent/teacher conference; a school event, such as a sports event; and a parent volunteer event, such as chaperoning a school dance. The analysis considers each activity individually and measures attendance as a binary variable, "yes, attended" or "no, did not attend."

Student and Household Characteristics by Public and Private School Types

Data from the National Household Education Surveys Program (NHES) show that the percentage of children enrolled in public, assigned schools for 1st through 12th grades decreased from 80 percent in 1993 to 76 percent in 1999. The decrease in public, assigned school enrollment was almost completely offset by an increase from 11 to 14 percent in public, chosen school enrollment. Enrollment in private, church-related schools remained relatively stable at 7 or 8 percent between 1993 and 1999 and enrollment in private, not church-related schools stayed at 2 percent. Most of the overall change in enrollment took place between 1993 and 1996 (figure 1).

Figure 1.— Percentage of students enrolled in grades 1–12 by public and private school type: 1993, 1996, and 1999



NOTE: Includes homeschooled students enrolled in public or private schools for 9 or more hours per week.
SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and the Parent Survey of the NHES, 1999.

The general patterns and trends in enrollment in the four types of schools studied here were broadly reflected across a wide range of students from many different backgrounds. Table 1

shows the estimates and standard errors for these data.[17] The following discussion considers differences in the type of school attended by students' grade, sex, race and ethnicity, disability status, household income, parents' education, family structure, region, and urbanicity of students' residence.

Students' grade and sex

In 1993, there were few differences in enrollment in types of schools among grade groups. However, by 1996 and 1999 there were differences in enrollment. In 1996 and 1999, a higher percentage of students in grades 6 to 8 attended public, assigned schools than did students in grades 1 to 5 while a higher percentage of students in grades 1 to 5 and grades 9 to 12 attended public, chosen schools than did students in grades 6 to 8. In the private school types, in all survey years, students in grades 1 to 5 were more likely to attend private, church-related schools than were students in the upper grades, 9 to 12. There were no differences detected among grade groups and years for students in private, not church-related schools.

Overall, girls and boys followed the same patterns of enrollment in school types as the overall population with a decrease in public, assigned school enrollment over the survey years and an increase in public, chosen school enrollment. Slightly more girls attended private, church-related schools in 1993 (8 percent vs. 7 percent) and slightly more boys attended private, not church-related schools in 1996 (3 percent vs. 2 percent).

Race and ethnicity

In each survey year, a smaller percentage of Black students than White students attended public, assigned schools. In 1999, the rate of assigned school enrollment for Black students (71 percent) was 6 percentage points lower than the rate of enrollment for White or Hispanic students (77 percent each). In each year, Black students had a higher rate of enrollment in public, chosen schools than did Hispanic students, and Black and Hispanic students had higher enrollment rates in public, chosen schools than White students. Black students were enrolled in public, chosen schools at a rate of 19 percent in 1993 and 23 percent in 1999 while Hispanic students were

[17] For additional details about this population, please see table A1 in appendix A.

enrolled at a rate of 14 percent in 1993 and 18 percent in 1999. Nine and 11 percent of White students were enrolled in public, chosen schools in 1993 and 1999, respectively (table 1). A larger percentage of White students attended each type of private school than did Black or Hispanic students in all three years.

Disability status

In 1999, about 75 percent of students with a disability attended public, assigned schools, 16 percent attended public, chosen schools, 6 percent attended private, church-related schools, and 2 percent attended private, not church-related schools. The percentage of students with disabilities attending private, church-related schools (6 percent) was two percentage points lower than the percentage of students with no disabilities attending private, church-related schools (8 percent). There were no differences detected in public, assigned and public, chosen school enrollment or in private, not church-related school enrollment for students with and without disabilities. Comparable data on students with disabilities are not available for 1993 and 1996, therefore it is not possible to report on a trend in the enrollment of these children.

Table 1.— Percentage of students enrolled in grades 1–12 by public and private school types, and by student and household characteristics: 1993, 1996, and 1999

Student and household characteristics	School type																	
	Public, assigned						Public, chosen						Private, church-related					
	1993		1996		1999		1993		1996		1999		1993		1996		1999	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Total	**80**	**0.4**	**76**	**0.5**	**76**	**0.4**	**11**	**0.4**	**14**	**0.4**	**14**	**0.4**	**8**	**0.3**	**8**	**0.3**	**7**	**0.3**
Grade level																		
Grades 1–5	79	0.6	74	0.7	74	0.6	12	0.4	15	0.5	15	0.5	8	0.4	9	0.4	9	0.4
Grades 6–8	81	1.2	79	0.9	79	0.8	10	1.3	11	0.6	12	0.7	7	0.5	7	0.5	7	0.4
Grades 9–12	81	0.8	76	0.7	77	0.7	11	0.5	14	0.6	16	0.6	7	0.5	7	0.4	5	0.4
Race/ethnicity																		
White, non-Hispanic	81	0.5	77	0.6	77	0.5	9	0.4	11	0.4	11	0.4	9	0.4	9	0.4	9	0.4
Black, non-Hispanic	77	1.0	73	1.4	71	1.2	19	0.8	22	1.3	23	1.2	3	0.4	4	0.4	4	0.5
Hispanic	79	1.1	76	1.1	77	1.0	14	1.0	16	0.9	18	1.0	6	0.5	6	0.7	4	0.4
Other, non-Hispanic	73	2.8	69	1.8	73	2.2	15	2.9	19	1.8	17	2.0	9	1.4	10	1.2	7	1.1
Sex																		
Male	81	0.5	77	0.6	76	0.6	11	0.4	13	0.5	14	0.5	7	0.4	8	0.4	7	0.3
Female	79	0.6	76	0.7	75	0.6	11	0.5	14	0.6	15	0.5	8	0.4	8	0.3	8	0.4
Disability status																		
Has a disability	—	—	—	—	76	0.9	—	—	—	—	16	0.8	—	—	—	—	6	0.4
Does not have a disability	—	—	—	—	76	0.5	—	—	—	—	14	0.4	—	—	—	—	8	0.3
Household income																		
$10,000 or less	83	1.1	77	1.5	74	1.6	14	0.9	19	1.4	22	1.5	3	0.5	3	0.5	3	0.6
10,001–20,000	82	1.6	79	1.1	78	1.1	14	1.7	16	1.1	17	1.0	3	0.4	4	0.6	3	0.5
20,001–35,000	82	0.6	78	0.9	78	0.8	11	0.6	14	0.8	16	0.7	7	0.6	6	0.5	4	0.4
35,001–50,000	80	1.0	77	0.9	77	0.9	10	0.6	12	0.8	14	0.7	9	0.7	9	0.6	8	0.6
50,001–75,000	77	0.9	76	0.9	78	0.9	9	0.6	10	0.6	11	0.6	11	0.7	12	0.8	9	0.7
More than $75,000	72	1.4	68	1.1	70	0.9	8	0.6	11	0.7	10	0.6	14	1.1	15	0.9	14	0.7

Student and household characteristics	School type									
	Private, not church-related									
	1993		1996		1999					
	%	s.e.	%	s.e.	%	s.e.				
Total	**2**	**0.1**	**2**	**0.1**	**2**	**0.1**				
Grade level										
Grades 1–5	2	0.1	2	0.2	2	0.2				
Grades 6–8	2	1.9	2	0.2	2	0.2				
Grades 9–12	2	0.3	3	0.3	2	0.2				
Race/ethnicity										
White, non-Hispanic	2	0.2	3	0.2	3	0.2				
Black, non-Hispanic	1	0.2	1	0.3	2	0.3				
Hispanic	1	0.2	1	0.3	1	0.2				
Other, non-Hispanic	3	0.7	2	0.6	3	0.6				
Sex										
Male	2	0.2	3	0.2	2	0.2				
Female	2	0.2	2	0.2	2	0.2				
Disability status										
Has a disability	—	—	—	—	2	0.3				
Does not have a disability	—	—	—	—	2	0.2				
Household income										
$10,000 or less	#	0.2	2	0.5	1	0.4				
10,001–20,000	#	0.2	1	0.3	1	0.4				
20,001–35,000	1	0.1	1	0.2	1	0.2				
35,001–50,000	2	0.2	2	0.2	2	0.3				
50,001–75,000	2	0.3	2	0.3	2	0.3				
More than $75,000	6	0.9	6	0.5	5	0.5				

See footnotes at end of table

Table 1.— Percentage of students enrolled in grades 1–12 by public and private school types, and by student and household characteristics: 1993, 1996, and 1999—Continued

Student and household characteristics	School type											
	Public, assigned			Public, chosen			Private, church-related			Private, not church-related		
	1993	1996	1999	1993	1996	1999	1993	1996	1999	1993	1996	1999
	% s.e.	% s.e.	% s.e.	% s.e.	% s.e.	% s.e.	% s.e.	% s.e.	% s.e.	% s.e.	% s.e.	% s.e.
Total	**80 0.4**	**76 0.5**	**76 0.4**	**11 0.4**	**14 0.4**	**14 0.4**	**8 0.3**	**8 0.3**	**7 0.3**	**2 0.1**	**2 0.1**	**2 0.1**
Parents highest level of education												
Less than high school diploma	84 1.1	79 1.7	80 1.4	14 1.1	17 1.5	18 1.5	2 0.5	2 0.5	2 0.4	# 0.1	2 0.7	1 0.3
High school diploma or GED	84 0.6	82 0.8	80 0.8	11 0.6	12 0.8	14 0.7	5 0.3	5 0.4	4 0.4	1 0.2	1 0.1	1 0.2
Some college/vocational/technical	80 0.7	76 0.9	77 0.7	11 0.7	15 0.7	15 0.7	8 0.5	7 0.5	6 0.4	1 0.2	2 0.2	1 0.2
Bachelor's degree	76 1.4	71 1.2	72 1.1	9 0.7	13 1.0	13 0.8	13 1.0	13 0.9	13 0.8	3 0.4	3 0.4	3 0.4
Graduate/professional school	73 1.1	66 1.2	68 1.1	10 0.7	13 0.9	13 0.7	13 0.9	15 1.0	13 0.8	4 0.5	6 0.5	6 0.6
Family structure												
Two parents	80 0.5	76 0.5	77 0.5	9 0.5	12 0.4	12 0.4	9 0.3	10 0.4	8 0.4	2 0.2	2 0.2	3 0.2
One parent	79 0.8	75 0.9	74 0.7	15 0.6	18 0.9	18 0.6	5 0.5	5 0.4	5 0.4	1 0.2	2 0.2	2 0.3
Non-parent guardians	84 2.3	80 2.9	73 2.6	14 2.0	15 2.1	22 2.7	2 0.5	2 0.7	4 0.8	1 0.4	3 1.6	1 0.4
Region												
Northeast	78 0.8	74 1.0	74 1.1	9 0.6	13 0.9	14 0.8	11 0.7	9 0.9	9 0.6	2 0.4	4 0.4	4 0.4
South	82 0.6	79 0.6	78 0.6	11 0.4	13 0.5	14 0.5	5 0.3	6 0.4	6 0.4	2 0.2	2 0.3	2 0.2
Midwest	80 0.8	75 0.9	76 0.8	10 0.6	12 0.8	13 0.8	9 0.5	11 0.7	9 0.6	1 0.2	1 0.2	1 0.2
West	79 1.1	74 1.0	75 0.9	13 1.0	18 0.8	18 0.7	7 0.5	6 0.5	5 0.4	2 0.2	2 0.3	2 0.3
Urbanicity												
Urban, inside urban area	75 0.5	71 0.6	71 0.5	14 0.4	16 0.6	17 0.4	10 0.4	10 0.4	9 0.3	2 0.1	3 0.2	3 0.2
Urban, outside urban area	87 0.8	81 1.1	82 1.1	8 0.8	11 0.9	12 0.9	5 0.4	7 0.7	5 0.6	1 0.2	1 0.3	1 0.3
Rural	88 1.1	85 0.8	85 0.8	7 1.1	9 0.6	11 0.6	4 0.5	4 0.4	4 0.4	1 0.2	2 0.3	1 0.2

— Not available.

Rounds to zero.

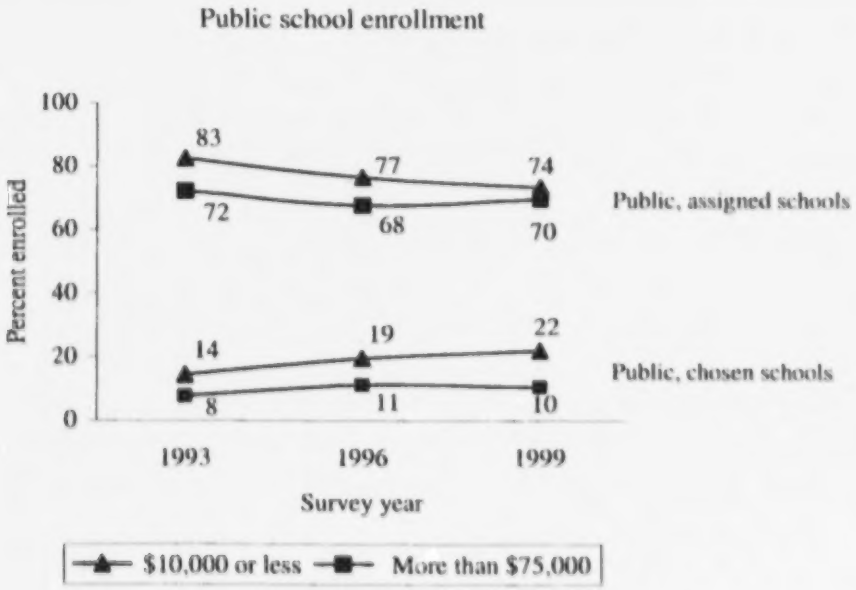
NOTE: s.e. is standard error. Percentages may not add to 100 due to rounding. Includes homeschooled students enrolled in public or private schools for 9 or more hours per week. The categories for household income are in current dollars, which have not been adjusted for inflation. Hence, they do not reflect the same purchasing power for the three years.

SOURCE: U.S. Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and Parent Survey of the NHES, 1999.

Household income

The most noticeable trend in public school enrollment was the movement away from public, assigned school enrollment and toward public, chosen school enrollment by the lowest-income students (see figure 2). In 1993, a higher percentage of students living in households with incomes of $10,000 or less attended public, assigned schools (83 percent), than did students living in households with incomes of more than $75,000 (72 percent). Differences were rare or not detected in the middle-income categories, compared to the extremes in each year, for students in public, assigned schools.

Figure 2.— Percentage of students enrolled in grades 1–12 in public, assigned and public, chosen schools by lowest and highest household income groups ($10,000 or less and more than $75,000): 1993, 1996, and 1999



NOTE: Includes homeschooled students enrolled in public or private schools for 9 or more hours per week. The categories for household income are in current dollars, which have not been adjusted for inflation. Hence, they do not reflect the same purchasing power for the three years.
SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and the Parent Survey of the NHES, 1999.

By 1999, there was no detectable difference in the percentage of students enrolled in public, assigned schools between the $10,000 or less and more than $75,000 income ranges.[18] The decrease in public, assigned school attendance for students living in households with incomes of less than $10,000 was mirrored by an increase in the proportion of these students attending public, chosen schools (14 percent in 1993 to 22 percent in 1999). Note that the categories for household income are in current dollars, which have not been adjusted for inflation.[19]

The rate of enrollment in private schools stayed the same for most income groups across the six-year period. Students in households with incomes of more than $75,000 had a higher enrollment rate in private schools in 1993, 1996, and 1999 than did students in other income groups. Students in the highest income group (more than $75,000) were enrolled in private, church-related schools at about five times the rate of enrollment for students in the lowest income group ($10,000 or less) in 1993 and 1999. Comparing the highest income groups and middle income groups, 14 percent of students living in households with an income of more than $75,000 were enrolled in private, church-related schools in 1993 and 1999, compared to eight or nine percent of students living in households with an income of $35,000 to $50,000. Enrollment in private, not church-related schools had a pattern of enrollment similar to private, church-related schools between the highest and lowest income groups and the highest and middle income groups, but there were no differences detected between the lowest and middle income groups.

Parents' highest level of education

Parents who are more educated are also more likely than other parents to seek out different educational opportunities and choices for their children (Nord, Brimhall & West 1997). As expected, in each survey year, students' whose parents highest education level was a bachelor's degree or a graduate or professional degree had a higher rate of enrollment in private

[18] The data also show a slight increase in enrollment in private, not church-related schools among students in the lowest income category between 1993 and 1996. While this might have occurred, since the data reported here are based on parents' reports of their children's school enrollment and the change is very small (2 percentage points), the increase in low-income enrollment in private, not church- related schools may be an artifact of reporting error. A 1999 field test of this item showed that with the increase in the number of magnet and charter schools, some parents have difficulty distinguishing between private, not church-related schools and public, chosen schools because they consider public magnet or charter schools to be private schools.

[19] Income data are categorical and thus were not adjusted for inflation. Independent analyses not shown here indicate that the patterns found for unadjusted income are the same as those found using a measure of poverty, which adjusts for inflation.

schools, both church-related and not church-related, than students whose parents obtained at most a high school diploma, GED or less.[20] Unlike income, differences in public, assigned school enrollment among different education levels persisted from 1993 to 1999. Students whose parents were relatively well educated were less likely to be enrolled in a public, assigned school than students whose parents were relatively less well educated. The difference between the highest and lowest education levels in 1993 in the percentage of students enrolled in public, assigned schools (73 vs. 84 percent) was still present in 1999 (68 vs. 80 percent).

During the three-year period between 1993 and 1996, the percentage of students enrolled in public, assigned schools decreased and the percentage enrolled in public, chosen schools increased only for students whose parents attained an education beyond a high school diploma or GED. By 1999, students whose parents' highest level of education was a high school diploma or GED also had a decreased rate of public, assigned school enrollment and an increase in public, chosen school enrollment. There was no change detected in the rate of enrollment in public, assigned schools across the 3 time points for students whose parents had less than a high school diploma.[21]

Family structure

Students who lived in households with non-parent guardians (e.g., grandparents or godparents) experienced a decrease of 11 percentage points in public, assigned school attendance between 1993 and 1999 and an 8 point increase in public, chosen school attendance. By 1999, 22 percent of students living in households with non-parent guardians attended public, chosen schools—10 percentage points higher than students living in two-parent households. In addition, a greater percentage of students living in one-parent households attended public, chosen schools (18 percent) than did students living in two-parent households (12 percent) in 1999. The pattern of attendance for students living in households with non-parent guardians is expected because many students living with non-parent guardians were Black, non-Hispanic students, lived in urban areas, and had low household incomes (data not shown in tables). Data presented in this report show that Black students, students living in urban areas, and students living in families

[20] Statistically, there was one exception, in 1996 there were no differences detected between parents with a bachelor's degree and parents with less than a high school degree.
[21] Apparent differences for students whose parents had less than a high school diploma were not statistically significant, possibly because of the relatively large standard errors for those estimates.

with a low household income were more likely than other students to attend public, chosen schools. Given the relationships found in the data, it is likely that the relationship between family structure and public, chosen school attendance can be explained, at least in part, by the influence of these other common factors—race/ethnicity, urbanicity, and household income. A regression analysis of the 1999 data shows that the relationship between students living with non-parent guardians and public, chosen school attendance is not significant once other factors (urbanicity, income, and race) that are associated with attending public, chosen schools are controlled.

Students from two-parent families were less likely to be in public, chosen schools than were other students. However, students living in two-parent households were more likely to be enrolled in private, church-related schools than students with one-parent households in all three of the survey years. For example, 8 percent of children with two-parent households attended private, church-related schools, compared to 5 percent of children with one-parent households in 1999.

Region and Urbanicity

Overall, the data suggest that in areas of the country which have been shown to have greater availability of school choice in the public school system, namely in the western region of the country and in urban areas (U.S. Department of Education 1996a), there is greater use. In 1999, students living in the West had a higher rate of enrollment in public, chosen schools (18 percent) than students living in any other region (13 to 14 percent). Students living in the Northeast and Midwest had a higher rate of enrollment in private, church-related schools than students living in the South or West regions. Although the percentage of students enrolled in public, chosen schools was higher in the West in 1999, the percentage of students enrolled in public schools of choice increased for students in all regions from 1993 to 1999. In general, enrollment rates for private, church-related and private, not church-related schools remained relatively stable within each of the regions from 1993 through 1999.

Students living inside urban areas were enrolled in public, chosen and private, church-related schools at a higher rate than students living just outside urban areas or in rural areas in all three survey years.[22] Between 1993 and 1999, the rate of enrollment in public, assigned schools

[22] The definitions for these categories are taken directly from the 1990 Census of Population. An urban area comprises a place and the adjacent densely settled surrounding territory that together have a minimum

(Footnotes continued on next page)

decreased (four and five percentage points, respectively) and the rate of enrollment in public, chosen schools increased (three and four percentage points respectively) for students living inside and just outside urban areas. While the rate of enrollment in public, chosen schools for students in rural areas did increase between 1993 and 1999, there was no detectable decrease in their public, assigned enrollment rate. Approximately 85 percent of students in rural areas continued to be enrolled in public, assigned schools in 1999.

Characteristics of Homeschooled Children

Some parents turn to homeschooling as an alternative to sending their children to public or private schools. In 1999, approximately 850,000 students, ages 5 to 17 with a grade equivalent of kindergarten to grade 12, were homeschooled either full or part-time—accounting for 1.7 percent of the school-age population (Bielick, Chandler and Broughman 2001). This section uses data from the 1999 Parent Survey to compare the characteristics of students who were primarily homeschooled to the characteristics of students who attended public or private schools in 1999.[23] The population analyzed in this section on homeschooling differs from the population in the previous sections of the report. Because questions were only asked about homeschooled children ages 5 to 17 years old, the analysis in this section is restricted to just those 1st through 12th graders who are 5 to 17 years old.[24]

Table 2 shows the percentage of students with various demographic characteristics within the four types of public and private schools and homeschoolers. The similarities and differences among students in the four types of public and private schools described in the previous section are also reflected in the estimates in table 2. The estimates in the table suggest that homeschoolers differ from students in public and private schools on a number of characteristics.

---

population of 50,000 people. Households are considered to be urban if they are located inside this urban area—referred to in this report as *inside urban area*— or outside but adjacent to the urban area where the population is at minimum 2,500 people—referred to in this report as *outside urban area*. Places not classified as inside or outside urban areas are *rural*.

[23] For this analysis, students who were primarily homeschooled were defined as students who were homeschooled and who did not attend public or private schools for more than 8 hours per week. Students who were homeschooled and who also attended public or private schools for 9 or more hours per week were considered to be students in public or private schools.

[24] For additional details about this population and how it compares to the full 1st – grade 12 population, please see table A3 in appendix A.

Table 2.—Percentage of students ages 5–17 enrolled in grades 1–12 by public and private school types and homeschool, by student and household characteristics: 1999

Student and household characteristics	School type and homeschool									
	Public, assigned		Public, chosen		Private, church-related		Private, not church-related		Homeschooled*	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Total	**100**	†	**100**	†	**100**	†	**100**	†	**100**	†
Grade level										
Grades 1–5	43	0.3	47	1.2	52	1.6	47	2.5	44	4.1
Grades 6–8	26	0.2	21	0.9	26	1.1	24	2.2	24	3.1
Grades 9–12	30	0.3	32	1.1	22	1.4	29	2.3	32	3.8
Race/ethnicity										
White, non-Hispanic	65	0.5	51	1.4	78	1.3	75	2.3	78	3.8
Black, non-Hispanic	15	0.3	25	1.3	10	1.0	11	1.8	8	3.0
Hispanic	14	0.3	17	0.9	7	0.8	7	1.2	8	2.1
Other, non-Hispanic	5	0.3	6	0.7	5	0.9	7	1.4	6	2.3
Sex										
Male	51	0.6	50	1.1	48	1.8	53	3.5	47	3.6
Female	49	0.6	50	1.1	52	1.8	47	3.5	53	3.6
Disability status										
Has a disability	21	0.6	22	1.3	16	1.3	23	2.3	24	3.4
Does not have a disability	79	0.6	78	1.3	84	1.3	77	2.3	76	3.4
Household income										
$10,000 or less	12	0.4	19	1.2	5	1.0	8	2.1	7	2.5
10,001–20,000	13	0.3	15	0.9	6	0.9	7	1.8	16	3.7
20,001–35,000	22	0.5	23	1.1	13	1.3	13	2.1	21	3.7
35,001–50,000	18	0.5	17	0.9	19	1.3	15	2.2	19	3.1
50,001–75,000	18	0.5	13	0.7	20	1.5	15	1.8	20	3.1
More than $75,000	18	0.5	14	0.9	38	1.7	43	3.2	17	2.9
Parents highest level of education										
Less than high school diploma	9	0.4	11	1.0	2	0.5	4	1.3	1	0.6
High school diploma or GED	29	0.5	28	1.4	15	1.3	15	2.5	18	3.2
Some college/vocational/technical	31	0.5	31	1.4	25	1.6	17	2.5	32	4.1
Bachelor's degree	15	0.4	15	0.9	29	1.7	21	2.5	25	4.1
Graduate/professional school	15	0.4	15	0.9	29	1.7	43	3.1	24	4.8

See footnotes at end of table

Table 2.—Percentage of students ages 5–17 enrolled in grades 1–12 by public and private school types and homeschool, by student and household characteristics: 1999—Continued

Student and household characteristics	School type and homeschool									
	Public, assigned		Public, chosen		Private, church-related		Private, not church-related		Homeschooled*	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Total (Percent)	**100**	†	**100**	†	**100**	†	**100**	†	**100**	†
Family structure										
Two parents	66	0.5	55	1.1	76	1.7	71	3.1	80	3.6
One parent	31	0.5	39	1.0	22	1.6	27	3.1	17	3.2
Non-parent guardians	3	0.2	6	0.7	2	0.4	2	0.7	3	2.0
Region										
Northeast	20	0.3	19	1.1	24	1.3	31	3.1	15	3.9
South	35	0.4	32	1.2	31	1.4	36	3.2	44	4.8
Midwest	24	0.4	23	1.1	31	1.6	13	1.8	16	3.0
West	21	0.3	26	1.1	14	1.2	21	2.2	24	4.0
Urbanicity										
Urban, inside urban area	58	0.5	71	1.1	78	1.4	80	2.4	52	4.5
Urban, outside urban area	13	0.5	10	0.9	9	1.1	7	1.4	12	2.6
Rural	28	0.4	19	1.0	13	1.3	13	2.1	36	4.4

† Not applicable

* Students who are homeschooled and not enrolled in school for 9 or more hours.

NOTE: s.e. is standard error. Percentages may not add to 100 due to rounding. The categories for household income are in current dollars, which have not been adjusted for inflation. Hence, they do not reflect the same purchasing power for the three years.

SOURCE: U.S Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

Homeschoolers differed from students in public schools in that their parents tended to be better educated. Homeschoolers were more likely to be White and to live in two-parent households than were students in public, assigned or public, chosen schools. With the exception of two income groups ($10,000 or less for public, assigned and chosen, and $50,001-75,000 for public, chosen), no other statistically significant differences in household income were detected between homeschoolers and students in public schools.[25] Geographically, homeschooled students were more likely to reside in the South and in rural areas than students in public, chosen schools and were less likely to reside in the Midwest than students in public, assigned schools.

Homeschoolers differed from private school students in fewer ways than they differed from public school students. Homeschoolers were less likely than private school students to live in households with annual incomes over $75,000. They were also less likely to live in the

[25] Note that standard errors for many of the homeschool estimates are relatively large. Results for these estimates should be interpreted with caution.

Northeast and inside urban areas and more likely to live in rural areas compared to private school students. Looking at the different types of private schools, homeschoolers were more likely than were students in private, church-related schools to have a disability.

Parent Involvement and Satisfaction, and Student Plans for Postsecondary Education

Results prior to this section showed the relationships between key student and family characteristics and the use of school choice. This section shows how the kind of school children attended relates to several important behavior and attitudinal variables. In particular, the relationships between the type of school students attended, and their parents' involvement in and satisfaction with the students' schools are examined. The analysis focuses on three questions: 1) Are students in schools of choice more likely to have involved parents than students in assigned schools? 2) Are students in schools of choice more likely to have parents who are satisfied with their children's schools than students in assigned schools? 3) Do parents of students in schools of choice have greater expectations for their children's postsecondary education than parents of students in other schools?

The population considered in this section differs from the population in the previous sections of the report. Because questions about parent satisfaction and involvement were only asked for students in 3rd through 12th grade in 1993, the analysis in this section is limited to just those students for each survey year. Parents of homeschoolers were not asked about their level of satisfaction nor their involvement in public or private schools.[26]

Parent satisfaction

Parents who chose the schools their children attended were more satisfied with the schools their children attended than were other parents. In both 1993 and 1999, higher percentages of parents of students in grades 3 to 12 who attended private school (both church-related and not church-related) were very satisfied with their children's schools, teachers, academic standards, and order and discipline than parents whose children attended public school

---

[26] Students who were homeschooled and who also attended public or private schools for 9 or more hours per week were considered to be students in public or private schools in 1999. Data about these part-time homeschoolers is not available for 1993 or 1996.

(both assigned and chosen).[27] Parents of children in public, chosen schools were more satisfied than were parents of children in public, assigned schools, but were less satisfied than private school parents. Looking only at the 1999 data, parents of students who attended public, chosen schools were more likely to be very satisfied with the various aspects of their children's schools than were parents of students who attended public, assigned schools (table 3, figure 3). Roughly 8 percent more students in public, chosen schools had parents who were very satisfied with the teachers at their school than students in public, assigned schools. This difference widened to 14 percentage points for parent evaluations of the students' schools in general.

Table 3.—Percentage of students in grades 3-12 whose parents were very satisfied with of their children's schools by public and private school type: 1993 and 1999

Parent satisfaction	School type											
	Public, assigned				Public, chosen				Private, church-related				Private, not church-related			
	1993		1999		1993		1999		1993		1999		1993		1999	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Very satisfied with school	52	0.7	48	0.7	61	2.6	62	1.0	83	1.5	80	1.7	80	3.3	76	2.4
Very satisfied with teachers	56	0.8	54	0.6	62	1.8	62	1.0	75	1.6	76	1.9	77	3.2	75	2.9
Very satisfied w/academic standards	55	0.6	53	0.8	63	3.0	63	1.3	84	1.4	81	1.65	81	3.3	79	2.6
Very satisfied w/order and discipline	55	0.8	54	0.6	63	1.7	63	1.2	87	1.1	87	1.3	74	3.5	80	2.8

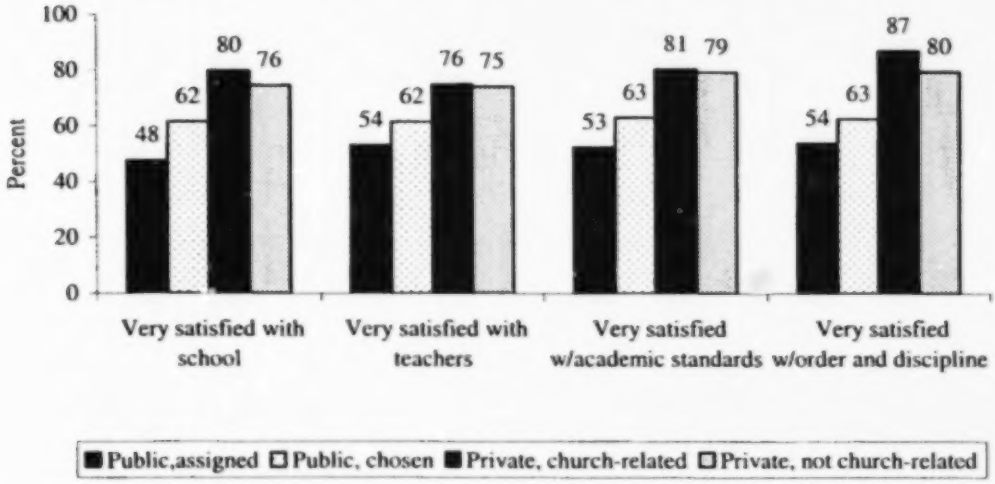
— Not available.

NOTE: s.e. is standard error. Excludes homeschooled students.

SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, and Parent Survey of the NHES, 1999.

[27] In 1993, only parents of children in grades 3 to 12 were asked questions about their satisfaction with their children's schools.

Figure 3.— Percentage of students in grades 3-12 whose parents are very satisfied with various aspects of the students' schools by public and private school type: 1999



NOTE: Includes homeschooled students enrolled in public or private schools for 9 or more hours per week.
SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and the Parent Survey of the NHES, 1999.

Parent involvement

Not only did students in private schools have the most satisfied parents, they were also more likely than other students to have parents who were involved with their schools (tables 4a and 4b). Approximately 93 percent of parents of students in private, church-related and 87 percent of parents of students in private, not church-related schools said they attended a general meeting at the school in 1999 compared to 75 percent of parents of students in public, assigned and public, chosen schools. Fewer parents of students in each school type reported that they went to a parent-teacher conference. More parents of students in private schools, both church-related and not church-related reported attending a school event (84 and 76 percent) in 1999 than did parents of students in public, assigned or chosen schools (63 and 59 percent). Parents of children in private, church-related schools were twice as likely as parents of students in public, assigned or chosen schools to volunteer or serve on a committee (65 percent versus 30 percent and 31 percent, respectively). They were also more likely to volunteer or serve on a committee than were parents in not church-related private schools (53 percent). While parents of students in public,

chosen schools were more satisfied with their children's schools than parents of students in assigned schools, they were generally not more involved.

Table 4a—Percentage of students in grades 3–12 whose parents were involved in various ways with their children's schools by public school types: 1993, 1996, and 1999

Ways parents were involved	Public school type											
	Public, assigned						Public, chosen					
	1993		1996		1999		1993		1996		1999	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Attended a general meeting	75	0.7	73	0.6	75	0.6	73	2.1	73	1.3	75	1.3
Went to a parent-teacher conference	—	—	65	0.6	66	0.6	—	—	70	1.3	67	1.4
Attended a school event	66	0.8	65	0.6	63	0.7	61	1.8	62	1.5	59	1.4
Volunteered/served on a committee	33	1.1	32	0.5	30	0.5	31	2.8	31	1.3	31	1.2

— Not available.

NOTE: s.e. is standard error. Excludes homeschooled students.

SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and Parent Survey of the NHES, 1999.

Table 4b.—Percentage of students in grades 3–12 whose parents were involved in various ways with their children's schools by private school types: 1993, 1996, and 1999

Ways parents were involved	Private school type											
	Private, church-related						Private, not church-related					
	1993		1996		1999		1993		1996		1999	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Attended a general meeting	93	1.0	92	1.4	93	1.0	89	3.1	82	2.85	87	2.5
Went to a parent-teacher conference	—	—	82	1.5	86	1.1	—	—	75	2.9	74	3.0
Attended a school event	87	1.3	84	1.3	84	1.4	85	3.5	75	3.0	76	2.7
Volunteered/served on a committee	66	1.9	68	1.7	65	2.1	59	4.3	47	3.7	53	3.6

— Not available.

NOTE: s.e. is standard error. Excludes homeschooled students.

SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and Parent Survey of the NHES, 1999.

Plans for postsecondary education

One key measure of academic success given the importance of a college education in the current economy is whether students attain additional education after high school. While the NHES does not measure actual attendance, it provides data on an important predictor of a student's probability of obtaining education after high school—parents' expectations for their

children's educational attainment (Ingels et al. 2002). Parents of at least nine out of ten 6th through 12th grade students thought their children would attend postsecondary education after high school regardless of the type of school their child attends. As the 1999 data show, the percentage of students attending private, church-related schools whose parents thought they would attend school after high school was 5 and 6 percentage points higher than public, assigned and public, chosen school students. The percentage of students attending private, church-related schools whose parents thought they would graduate from a 4-year college was 10 percentage points higher than for public school students (tables 5a and 5b). Similar differences were not detected for parent expectations between public, assigned and public, chosen school students or between students in private, not church-related schools and other schools.[28]

Table 5a.—Percentage of students in grades 6–12 who plan to attend school after high school as reported by students' parents by public school types: 1993, 1996, 1999

Plans for postsecondary education	Public school type											
	Public, assigned						Public, chosen					
	1993		1996		1999		1993		1996		1999	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Plans for postsecondary education												
Will attend school after high school	92	0.3	91	0.5	92	0.5	93	0.8	91	1.1	91	1.0
Will graduate from a 4-year college	82	0.4	81	0.6	82	0.7	84	1.5	82	1.6	81	1.4

NOTE: s.e. is standard error. Excludes homeschooled students.

SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and Parent Survey of the NHES, 1999.

Table 5b.—Percentage of students in grades 6–12 who plan to attend school after high school as reported by students' parents by private school types: 1993, 1996, 1999

Plans for postsecondary education	Private school type											
	Private, church-related						Private, not church-related					
	1993		1996		1999		1993		1996		1999	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Plans for postsecondary education												
Will attend school after high school	97	0.5	97	1.2	97	1.1	96	2.1	95	2.1	96	1.7
Will graduate from a 4-year college	93	1.1	94	1.8	92	1.8	92	2.9	91	2.5	88	3.2

NOTE: s.e. is standard error. Excludes homeschooled students.

SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and Parent Survey of the NHES, 1999.

[28] Apparent differences between students in private not church-related schools and other schools were not statistically significant, possibly because of the large standard errors associated with the estimates for students attending private, not church-related schools.

Multivariate Analysis of Parent Satisfaction and Level of Involvement

The previous analyses showed that several household, parent, and student characteristics are related to the type of school students attend and that school type is related to parents' satisfaction and involvement. Because these household, parent, and student characteristics are related to the type of school attended by the child, it is possible that these characteristics are what actually drive the relationship between school-type on the one hand, and parent satisfaction and involvement on the other, or both. Although a complete analysis of parent satisfaction and involvement is beyond the scope of this report, a multivariate analysis using data from 1999 examines whether the relationships between school type and parent satisfaction and involvement remain when other household, parent, and student characteristics are controlled. In addition, the multivariate analysis considers the effects of parent involvement on parent satisfaction and the effects of parent satisfaction on parent involvement to illustrate how the two variables are related.

The multivariate analysis was conducted using ordinary least squares regression analysis. The results of the analysis are shown in tables 6 and 7. Table 6 shows the results for parent satisfaction and table 7 shows the results for parent involvement. In this analysis, parent satisfaction is the simple average of each of the 4 satisfaction items. Similarly, level of involvement is a sum of the number of activities parents reported they were involved in. Readers should refer to the *Survey Methodology and Technical Notes* section for detailed information about the regression analysis procedure.

In each table, the multivariate analysis includes three analyses. Analysis 1 shows the bivariate relationship between school type and the level of parents' satisfaction (table 6) and involvement (table 7) with their children's schools. Analysis 2 shows the relationships between several household, student, and parent characteristics and the level of parents' satisfaction and involvement with their children's schools. The third analysis contains the school type variables and the household, student, and parent variables and shows how school type relates to parents' satisfaction or involvement after controlling for household, student, and parent characteristics. The results of the regression analysis are summarized below.

Parent satisfaction

The regression results indicate that a number of household, parent, and student characteristics are related to parent satisfaction (table 6). The results in analysis 3 show that the relationship between school type and parent satisfaction remained significant even when household, parent, and student characteristics were considered. Parents who chose the schools their children attended, both public and private, were more satisfied than parents whose children attended public, assigned schools. Students in private schools tended to have parents who were more satisfied than students in public schools irrespective of public school type. Those parents who were most involved with their children's schools tended to be more satisfied with them.

Aside from school type, the results show that students' sex, race/ethnicity, grade, and disability status were associated with parental satisfaction. Parents of girls were more satisfied than the parents of boys and parents of White students were more satisfied than those of Black students or other, non-Hispanic students. In addition, the parents of elementary school students (grades 3 to 5) were more satisfied than parents of high school students (grades 9-12) and parents of students with no disability were more satisfied than parents of students with a disability.

Certain characteristics of these students' parents were also related to parental satisfaction. Even when controlling for various student, household, and school characteristics, parents with a high school education or higher tended to be less satisfied than parents with less than a high school education. Parents whose primary home-language was English were less satisfied than were other parents.[29] Apart from school type, school size as reported by parents also seems to be related to parental satisfaction. Generally speaking, students in schools with less than 1,000 pupils had parents who were more satisfied than students in schools of 1,000 or more.[30]

---

[29] Parents' English usage may also be a factor that influences the level of parent involvement in schools in the United States. It is included in the multivariate analysis to help explain the relationship between Hispanic ethnicity and parents' satisfaction and involvement with schools found in previous research (De La Luz Reynoso & Tidwill 1996).

[30] School size is measured by parents' reports of the number of students who attended their child's school. Parents were asked to report a broad category of school size. On average, parents somewhat underestimated the size of the child's school when compared to administrative records. Additionally, a separate analysis of highest and lowest grades in children's schools was undertaken to determine if the effects of school size were confounded by a correlation between school size and the grade levels at children's schools. There were no meaningful changes in the regression coefficients for school size as a result of this analysis.

Table 6.— Coefficients from OLS regressions on 3rd through 12th grade students' parents' reports of satisfaction with their childrens' school characteristics: 1999

	Average parent satisfaction 4-point scale (1=low, 4=high)					
	Analysis 1		Analysis 2		Analysis 3	
	b	s.e.	b	s.e.	b	s.e.
Household income						
$10,001 to $20,000			-0.04	0.038	-0.03	0.037
$20,001 to $35,000			-0.05	0.034	-0.04	0.034
$35,001 to $50,000			-0.04	0.036	-0.02	0.036
$50,001 to $75,000			-0.01	0.039	-0.01	0.037
$75,001 and above			-0.01	0.035	-0.02	0.034
Urbanicity						
Urban, inside urban area			0.07*	0.019	0.03	0.019
Urban, outside urban area			0.03	0.025	0.03	0.025
Parent's educational attainment						
High school diploma or GED			-0.07*	0.032	0.07*	0.033
Some college/vocational/technical			-0.12*	0.029	-0.12*	0.029
Bachelor's degree			-0.09*	0.030	-0.10*	0.030
Graduate/professional school			-0.04	0.032	0.07*	0.032
Sex (female)			0.03*	0.010	0.02*	0.010
Child's grade level						
Grades 3-5			0.16*	0.016	0.17*	0.016
Grades 6-8			0.02	0.019	0.03	0.019
Race and ethnicity						
Black, non-Hispanic			-0.05*	0.018	-0.05*	0.018
Hispanic			-0.03	0.023	-0.02	0.022
Other, non-Hispanic			-0.07*	0.030	-0.07*	0.030
Child has disability			-0.14*	0.018	-0.14*	0.017
Parents' English usage						
English only			-0.13*	0.030	-0.14*	0.029
English and another language			0.00	0.051	-0.02	0.052
Family structure						
One parent			-0.02	0.016	-0.03	0.016
Non-parent guardians			-0.02	0.047	-0.03	0.046
School size						
Less than 300 students			0.11*	0.021	0.05*	0.021
300-599 students			0.06*	0.020	0.04	0.020
600-999 students			0.05*	0.019	0.04*	0.019
Parent involvement			0.05*	0.006	0.04*	0.006
School type						
Public chosen	0.15*	0.013			0.15*	0.014
Private non-church related	0.33*	0.024			0.29*	0.024
Private church related	0.38*	0.017			0.31*	0.019
Constant	3.40	0.007	3.42	0.051	3.44	0.051

NOTE: s.e. is standard error. Excludes homeschooled students. Results followed by * are significant at the 0.05 level of significance.

SOURCE: U.S Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

Parent involvement

The multivariate analysis 1 in table 7 supports earlier statements that parents whose children attended private schools were more involved than parents whose children attended public, assigned schools or public, chosen schools.[31] However, the relationship between private school type and parent involvement was weakened when other household, parent, and student characteristics were considered. Parents who were more satisfied with their children's schools tended to be more involved with their children's schools.

Apart from the type of school the student attended, other student, parent and family, household, and school characteristics were related to parental involvement. Looking at the characteristics of the 3rd through 12th grade students, only one student characteristic seemed to be related to parent involvement and that was grade of enrollment. Students in grades 6-8 were more likely to have involved parents than students in grades 9-12 and students in grades 3-5 were the most likely to have involved parents. Parents of students with a race or ethnicity other than White, Black, or Hispanic were less involved compared to parents of White students.

Considering students' parents and families, students whose parents have completed at least high school and speak English at home and students who live in two-parent families have parents who were more involved than students with less educated parents, students with non-English speaking parents, or students who have family structures that do not include two parents. Looking at household characteristics, students from households making over $20,000 and from households in rural areas are more likely to have involved parents than students from poorer households and households inside urban areas.[32] In addition to the type of school the child attends, the size of the school as reported by parents also seems to be related to parental involvement. Students attending schools with fewer than 1,000 students tend to have more involved parents.[33]

---

[31] An OLS regression, not shown, using "public, chosen" schools as the comparison category provided the result that compares the private schools to a public, chosen schools.

[32] Statistically, no differences were detected between students in households with incomes of $10,000 or less and households with incomes of $10,001 and $20,000.

[33] A separate analysis of highest and lowest grades in children's schools was undertaken to determine if the effects of school size were confounded by a correlation between school size and the grade levels at children's schools. There were no meaningful changes in the regression coefficients for school size as a result of this analysis.

Table 7.— Coefficients from OLS regressions on 3rd through 12th grade students' parents' involvement in their children's schools: 1999

	Number of activities parents attended					
	Analysis 1		Analysis 2		Analysis 3	
	b	s.e.	lb	s.e.	b	s.e.
Household income						
$10,001 to $20,000			0.07	0.056	0.07	0.057
$20,001 to $35,000			0.19*	0.055	0.18*	0.055
$35,001 to $50,000			0.33*	0.057	0.32*	0.056
$50,001 to $75,000			0.38*	0.061	0.37*	0.061
$75,000 and above			0.50*	0.062	0.46*	0.061
Urbanicity						
Urban, inside urban area			-0.02	0.029	-0.06*	0.028
Urban, outside urban area			0.06	0.041	0.05	0.041
Parent's educational attainment						
High school diploma or GED			0.39*	0.058	0.39*	0.058
Some college/vocational/technical			0.59*	0.055	0.58*	0.056
Bachelor's degree			0.81*	0.062	0.78*	0.063
Graduate/professional school			0.86*	0.060	0.83*	0.061
Sex (female)			0.02	0.021	0.02	0.021
Child's grade level						
Grades 3-5			0.80*	0.031	0.81*	0.031
Grades 6-8			0.38*	0.034	0.39*	0.034
Race and ethnicity						
Black, non-Hispanic			-0.03	0.042	-0.02	0.042
Hispanic			-0.03	0.037	-0.02	0.037
Other, non-Hispanic			-0.13*	0.052	-0.12*	0.053
Child has disability			-0.05	0.030	-0.05	0.029
Parents' English usage						
English only			0.19*	0.060	0.17*	0.059
English and another language			-0.04	0.108	-0.06	0.105
Family structure						
One parent			-0.13*	0.030	-0.13*	0.030
Non-parent guardians			-0.19*	0.069	-0.19*	0.068
School size						
Less than 300 students			0.19*	0.040	0.11*	0.040
300-599 students			0.15*	0.031	0.12*	0.032
600-999 students			0.11*	0.036	0.09*	0.036
Parent satisfaction			0.18*	0.020	0.15*	0.021
School type						
Public chosen	-0.01	0.042			0.03	0.039
Private non-church related	0.54*	0.065			0.25*	0.061
Private church related	0.86*	0.034			0.48*	0.032
Constant	2.43	0.015	0.41	0.112	0.55	0.114

NOTE: s.e is standard error. Excludes homeschooled students. Results followed by * are significant at the 0.05 level of significance.

SOURCE: U.S Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

Summary and Conclusions

Policymakers, educators, and parents have many questions about alternatives to the traditional public school system. This report offers information about students' and families' use over the past decade of inter or intra-district public school choice, public magnet and charter schools, private schools that are both church-related and not church-related, and homeschooling. And, it sheds light on a number of important questions: Has the use of different types of public or private schools changed over time? What are the characteristics of students and families who use public or private schools? Have the characteristics of students and families who use public or private schools changed over time? Are parents who choose the public or private schools their children attend more satisfied with their choices than other parents, are they more involved in their children's schools, and are they more likely to expect their children to attend college and graduate with a 4-year college degree?

Findings from other studies show that the availability of public school choice has increased over the past decade. Findings in this report show that parents are taking advantage of increased public school choice opportunities. The percentage of students enrolled in public, chosen schools increased from 1993 to 1999 while the percentage of students enrolled in public, assigned schools decreased. The rate of enrollment in private, church-related schools remained stable, as did the small percentage of students in private, not church-related schools. There is greater use of school choice in those areas, mainly in the West and urban locations, which have been found in other studies to have school choice programs more widely available.

Findings from this report show that private schools have been disproportionately attended by students from families with high incomes and headed by parents with higher levels of education. Private school students also tended to be White and to live in two-parent households. However, it also shows that other students and families have used choice in the form of public, chosen schools. Students from families with low household incomes and racial/ethnic minorities used public, chosen schools at a higher rate than did other students.

Students who were homeschooled bore no close resemblance to the students in any one type of public or private schools. Homeschoolers were more likely to come from two-parent households and to have more highly educated parents than were public school students and were

more likely to have lower household incomes and live in rural areas than were private school students.

Choosing the public or private school a child attends is associated with parents' satisfaction with their children's schools. Regardless of whether students attended public, chosen or private schools, parents were more satisfied with their children's schools than were parents whose children attended assigned schools. Parent involvement was higher in private schools than in public schools, but parent involvement in public, chosen schools was not higher than parent involvement in public, assigned schools.

The distinction between public, chosen and public, assigned schools is an important one. Findings from this report suggest that public, chosen schools, grouped together across the Nation, are attended by students from diverse racial and ethnic backgrounds, family incomes, community types and among students with disabilities. Public, chosen schools were also associated with higher parent satisfaction than public, assigned schools based on parents' perception of qualities such as academic standards, teachers, and order and discipline. However, parents of students in public, chosen schools were not as satisfied with their children's schools as were parents of students in private schools. Results also indicate that parents of students in public, chosen schools were no more involved in their children's schools than parents of students in public, assigned schools, and public school children have parents who were generally less involved than their private school counterparts.

This report cannot answer questions about the availability of public school choice or other school choice programs. Research that combines information on both the availability and use of school choice could show whether the trends in the use of school choice shown in this report are large or small compared to the trends in the availability of school choice programs. Future research could also identify whether or not the use of public school choice programs exceeds or falls short of the rate of growth in the supply of public school choice options.

The National Household Education Surveys Program (NHES) is a telephone survey conducted for the U.S. Department of Education's National Center for Education Statistics (NCES). Data collections have taken place from January through early May in 1991 and January through April in 1993, 1995, 1996, and 1999. When appropriately weighted, each sample is nationally representative of all civilian, non-institutionalized persons in the 50 states and District of Columbia. The samples were selected using random-digit-dialing (RDD) methods, and the data were collected using computer-assisted telephone interviewing (CATI) technology.

Data from three administrations of the NHES were used in this report—the School Readiness and School Safety and Discipline Surveys from the NHES, 1993, the Parent and Family Involvement Survey of the NHES, 1996, and the Parent Survey of the NHES, 1999. A screening questionnaire administered to a member of the household age 18 or older was used to determine whether any children of the appropriate age lived in the household, to collect information on each child, and to identify the appropriate parent or guardian to respond for the sampled child. If one or two eligible children resided in the household, more detailed extended interviews were conducted about each child. If more than two eligible children resided in the household, generally two were sampled as interview subjects. Each interview was conducted with the parent or guardian most knowledgeable about the care and education of each sampled child. This report is based on subsets of the total sample collected in each of the survey years, specifically, children in 1st through 12th grades unless otherwise noted. The 1993 data was collected in two separate extended interviews—one for children aged three to 2nd grade and one for children in 3rd grade through 12th grade. Data from these two files were merged to provide information on children in 1st through 12th grades.

Response Rates

Screening interviews were completed with 63,844 households in 1993, 55,838 households in 1996, and with 57,278 households in 1999. The unit response rate for the Screener varied somewhat between these three survey years: 82 percent in 1993, 70 percent in 1996, and 74 percent in 1999. The completion rate, or the percentage of eligible sampled children for whom interviews were completed, was at or near 90 percent for the parent extended interviews in all three survey years.

For all three surveys, item nonresponse (the failure to complete some items in an otherwise completed interview) was very low. The item nonresponse rates for most variables in this report were less than 2 percent. For information about specific item response rates see the Data File User's Manual for each survey year. All items with missing responses (i.e., don't know where appropriate, refused, or not ascertained) were imputed using a hot-deck imputation procedure (Kalton and Kasprzyk 1986). As a result, no missing values remain.[34]

Data Reliability

Estimates produced using data from the NHES are subject to two types of errors, sampling and nonsampling errors. Nonsampling errors are errors made in the collection and processing of data. Sampling errors occur because the data are collected from a sample, rather than a census of the population.

Nonsampling Errors

Nonsampling error is the term used to describe variations in the estimates that may be caused by population coverage limitations and data collection, processing, and reporting procedures. The sources of nonsampling errors are typically problems like unit and item nonresponse, the differences in respondents' interpretations of the meaning of the questions, response differences related to the particular time the survey was conducted, the tendency for respondents to give socially desirable responses, and mistakes in data preparation.

In general, it is difficult to identify and estimate either the amount of nonsampling error or the bias caused by this error. For each NHES survey, efforts were made to prevent such errors from occurring and to compensate for them where possible. For instance, during the survey design phase, cognitive interviews were conducted for the purpose of assessing respondent knowledge of the topics, comprehension of questions and terms, and the sensitivity of items. The design phase also entailed extensive staff testing of the computer-assisted telephone interviewing (CATI) instrument and a pretest in which several hundred interviews were conducted to identify problems with the initial questionnaire.

---

[34] For more information on the imputation procedures used in the NHES:1993, NHES:1996 and NHES:1999, see the following NCES Working Papers: *Unit and Item Response, Weighting, and Imputation Procedures in the 1993 National Household Education Survey* (Brick et al. 1997), *Unit and Item Response, Weighting, and Imputation Procedures in the 1996 National Household Education Survey* (Montaquila and Brick 1997) and *The NHES:1999 Survey Methodology Report* (Nolin et al. 2000a).

An important nonsampling error for a telephone survey is failure to include persons who do not live in households with telephones. Weighting adjustments using characteristics related to telephone coverage were used to reduce the bias in the estimates associated with children who do not live in households with telephones.

Sampling Errors

The sample of households with telephones selected for each NHES survey is just one of many possible samples that could have been selected from all households with telephones. Therefore, estimates produced from each NHES survey may differ from estimates that would have been produced from other samples. This type of variability is called sampling error because it arises from using a sample of households with telephones rather than all households with telephones.

The standard error is a measure of the variability due to sampling when estimating a statistic; standard errors for estimates presented in this report were computed using a jackknife replication method. Standard errors can be used as a measure of the precision expected from a particular sample. The probability that a complete census count would differ from the sample estimate by less than 1 standard error is about 68 percent. The chance that the difference would be less than 1.65 standard errors is about 90 percent; and that the difference would be less than 1.96 standard errors, about 95 percent.

Standard errors for all of the estimates are presented in the tables. These standard errors can be used to produce confidence intervals. For example, an estimated 76 percent of students were reported to have attended public, assigned school in 1999. This figure has an estimated standard error of 0.4. Therefore, the estimated 95 percent confidence interval for this statistic is approximately 75 to 77 percent [76 percent +/– (1.96*0.4)]. That is, in 95 out of 100 samples from the same population, the estimated participation rate should fall between 75 and 77 percent.

Statistical Tests

The tests of significance used in this analysis are based on Student's *t* statistics. For comparisons of proportions, as the number of comparisons at the same significance level increases, it becomes more likely that at least one of the estimated differences will be significant merely by chance, that is, will be erroneously identified as different from zero. Even when there is no statistical difference between the means or percentages being compared, there is a 5 percent chance of getting a significant *t* value of 1.96 from sampling error alone. As the number of comparisons increases, the chance of making this type of error also increases.

In order to correct significance tests for multiple comparisons, a Bonferroni adjustment was used. This method adjusts the significance level for the total number of comparisons made with a particular classification variable. All the differences cited in this report are significant at the 0.05 level of significance after a Bonferroni adjustment.

Definitions of Variables

Most of the variables in this report were taken directly from the data files without manipulation. Some variables, such as household income, were collapsed into fewer categories for the analysis. The multivariate analysis required some additional manipulation of variables. The definitions of important and unique variables are explained below.

School type

The school type variable is a derived variable on the data files. In each year it was derived from the same series of the following questions:

Does (child) go to a public or a private school?

1=Public
2=Private

Is it (his/her) regularly assigned school or a school that you chose?

1=Assigned
2=Chosen
3=Assigned school is school of choice
(This response category was voluntary and appeared in 1993 only. This response category was coded as a chosen school in the school type derived variable).

Is the school affiliated with a religion? (1993)

1=Yes
2=No

Is the school church-related or not church-related? (1996, 1999)

1=Church-related
2=Not church-related

If the school was classified as public, it was further classified as either assigned or chosen. If the school was classified as private, it was further classified as either affiliated or not affiliated with a religion (1993) or church (1996, 1999). The response category, "assigned is chosen" that appeared in 1993 was coded as a chosen school.

Household Income

Household income is reported as a range in each of the NHES surveys. These ranges were collapsed into the following categories for this report:

$10,000 or less
$10,001 to 20,000
$20,001 to 35,000
$35,001 to 50,000
$50,001 to 75,000
More than $75,000

The categories for household income are current dollars, which have not been adjusted for inflation. Hence, they do not reflect the same purchasing power for the three years.[35]

Region

Region is determined by the Census definition of regions. The following states and the District of Columbia are in each Census region as follows:

Northeast: PA, NY, NJ, CT, RI, MA, VT, NH, ME
South: OK, TX, MS, AL, TN, KY, WV, MD, DE, DC, VA, NC, SC, GA, FL, LA, AR
Midwest: ND, SD, NE, KS, MN, IA, MO, WI, IL, MI, IN, OH
West: WA, OR, CA, NV, AZ, NM, UT, CO, WY, ID, MT, AK, HI

Urbanicity

This variable categorizes the household ZIP Code as urban or rural. The definitions for these categories are taken directly from the 1990 Census of Population. An urban area comprises a place and the adjacent densely settled surrounding territory that together have a minimum population of 50,000 people. Households are considered to be urban if they are located inside this urban area—referred to in this report as *inside urban area*—or outside but adjacent to the urban area where the population is at minimum 2,500 people—referred to in this report as *outside urban area*. Places not classified as inside or outside urban areas are *rural*.

Disability status

Data on disability status are based on parent reports. Parents were asked whether or not a doctor ever told the parent that the sampled child had several types of disabilities. Each disability

[35] Income data are categorical and thus were not adjusted for inflation. Independent analyses not shown here indicate that the patterns found for unadjusted income are the same as those found using a measure of poverty, which adjusts for inflation.

was asked about in a yes/no format. If the parent reported that the child had one or more of the disabilities asked about, the child was coded as having a disability.

Number of parents living in the household

Parents include birth, adoptive, step, or foster parents in the household. If two such parents were in the household, the number of parents living in the household was two. If one such parent was in the household, the number of parents living in the household was one. If no such parents were in the household, the number of parents was none and is referred to as nonparental guardians.

Parent satisfaction with various aspects of the school

The NHES measures parent satisfaction by asking parents how satisfied they are with four aspects of the students' school: the school; the teachers; the academic standards; and order and discipline. Parents are asked to rate their satisfaction as *very satisfied, somewhat satisfied, somewhat dissatisfied* or *very dissatisfied*. The analysis of parent satisfaction in this report looks at parents in each school type who were *very satisfied* with the students' school. The multivariate analysis uses an average satisfaction rating across the four satisfaction items. In order to generate the scale, the four response categories were reverse coded, where 1=very dissatisfied and 4=very satisfied. Then the responses to the four items were averaged to produce an overall scale of satisfaction that ranged from 1 to 4.

In order to determine the reliability of a scale of parental satisfaction with their children's schools, reliability analyses were conducted. Reliability analyses examine the extent to which multiple items measure the same underlying concept. Reliable measures can be used to create a scale to represent the concept. To assess the reliability of the four measures of parents' satisfaction with aspects of their child's education, Cronbach's alpha was used:

$\alpha = \frac{N * \bar{r}}{1 + (N-1) * \bar{r}}$, where N represents the number of variables and $\bar{r}$ is the average of the inter-item correlation among the variables (Kim & Mueller 1978). Cronbach's alpha ranges between 0 and 1, with values closer to 1 indicating greater reliability. The alpha for the parent satisfaction scale was .85. There is no absolute rule for acceptably high reliability, but researchers generally indicate that alpha levels above .70 indicate high reliability (Darren & Mallery 1999).

Parent involvement at the school

Parent involvement is measured by a series of questions about parents' attendance at different parent/school activities since the beginning of the school year: A general meeting, such as a PTA meeting; a parent/teacher conference; a school event, such as a sports game; and a parent volunteer event, such as chaperoning a school dance. The analysis considers each activity individually and measures attendance as a binary variable, "yes attended" or "no, did not attend." The multivariate analysis uses an index of these activities. The index is a sum ranging from 0 to 4 of the number of types of activities that parents were involved in. The distribution of scores on the index was 9 percent with no activities, 12 percent with one activity, 23 percent with two, 30 percent with three, and 25 percent with four.

School size

School size is measured by parents' reports of the number of students who attended their child's school. On average, parents somewhat underestimate the size of the child's school when compared to administrative records. Parents were asked to report a broad category of school size from the following four categories:

Under 300 students
300 to 599 students
600 to 999 students
1,000 or more students

Multivariate analysis methods

For the multivariate analyses presented in tables 6 and 7, ordinary least squares (OLS) regression equations were generated for the parent satisfaction and involvement variables. For each of the dependent variables, the first model contains coefficients from the regression of the dependent variable on school type only. The second model contains coefficients from the regression of the dependent variable regressed on the control variables (e.g., income, parent's educational attainment, and child's sex). In table 6, model 2 also includes parental involvement as a control variable; in table 7, parental satisfaction is included. In each table, model 3 contains the school type variable added to the variables from model two. By comparing the three models, it is possible to better evaluate the effect of school type on parent satisfaction and parent involvement with their child's education.

Interpreting the coefficients generated in the OLS regression is relatively straightforward. The slope coefficient, *b*, represents the linear relationship between the independent and dependent variables after holding the effect of all other independent variables constant. It is interpreted as the number of units of change in the dependent variable that occur for a one-unit change in the independent variable, assuming that the values of all other variables remain constant. For continuous independent variables, such as parent involvement in model 3 of table 6, the regression coefficient (b=.04) indicates that for each additional type of event that a parent attends, his/her satisfaction with the child's education increases by .04 points on a scale of 1 to 4.

For categorical variables, the association between the independent variable and the dependent is evaluated relative to the excluded category of the independent variable. For example, the variable "Child's Grade" contains three categories: grades 3-5, grades 6-8 and grades 9-12. The excluded category is grades 9-12. The regression coefficient for grades 3-5 in model 3 of table 7 (b=.78) is interpreted relative to the category of grades 9-12. In this example, the coefficient indicates that parents of children in grades 3-5 attend almost one more (.78) type of school event than do the parents of children in grades 9-12.

References

Algozzine, B., Yon, M., Nesbit, C. and Nesbit, J. (1999). *Parent Perceptions of a Magnet School Program.* Journal of Research and Development in Education. Vol. 32, No. 3, pp. 178-183.

Archibald, D. (1996). *SES and Demographic Predictors of Magnet School Enrollment.* Journal of Research and Development in Education. Vol. 29, No. 3, pp. 154-162.

Arum, R. & Beattie, I. eds. (2000). *The Structure of Schooling: Readings in the Sociology of Education.* Mayfield Publishing Company, Mountain View, California.

Bielick, S., Chandler, K. Broughman, S. P. (2001). *Homeschooling in the United States: 1999.* (NCES 2001–033). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Brick, J. M., Collins, M., Nolin, M. J., Ha, P. C., Levinsohn, M., Chandler, K. (1994a). *National Household Education Survey of 1993: School Readiness Data File User's Manual,* (NCES 94–193). U.S. Department of Education. National Center for Education Statistics. Washington, DC.

Brick, J. M., Collins, M., Nolin, M. J., Ha, P. C., Levinsohn, M., Chandler, K. (1994b). *National Household Education Survey of 1993: School Safety and Discipline Data File User's Manual,* (NCES 94–218). U.S. Department of Education. National Center for Education Statistics. Washington, DC.

Choy, S. (1997). *Findings from the Condition of Education 1997, No. 12: Public and Private Schools: How Do They Differ?* (NCES 97-983). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Coleman, J. & Hoffer, T. (1987) *Schools, Families, and Communites.* In Arum, Richard & Beattie, Irene eds. 2000. *The Structure of Schooling: Readings in the Sociology of Education.* Mayfield Publishing Company, Mountain View, California. pp.69-77.

Collins, M., Brick, J. M., Nolin, M. J., Vaden-Kiernan, N., Gilmore, S., Chandler, K., and Chapman, C. (1997). *National Household Education Survey of 1996: Data File User's Manual, Volume I* and *Volume III: Parent and Family Involvement in Education and Civic Involvement-Parent Data File,* (NCES 97–423). U.S. Department of Education. National Center for Education Statistics Washington, DC.

Cookson, P. (1994) Reformers and Revolutionaries: The Drama of Deregulation. In Arum, Richard & Beattie, Irene eds. 2000. *The Structure of Schooling: Readings in the Sociology of Education.* Mayfield Publishing Company, Mountain View, California. pp.488-501.

Cookson, P. & Percell, C. H. (1985) The Chosen Ones. In Arum, Richard & Beattie, Irene eds. 2000. *The Structure of Schooling: Readings in the Sociology of Education.* Mayfield Publishing Company, Mountain View, California. pp.136-145.

Darren, G. and Mallery, P. (1999). *Spss for Windows – Step by Step: A Simple Guide and Reference*. Needham Heights, MA: Allyn & Bacon.

De La Luz Reynoso, M. & Tidwill, R. (1996) Hispanic parents' attitudes and participation. *School Psychology International*, 17, pp. 205-221.

Education Week. (1999). *Choice and Vouchers*. August 23, 1999. [on-line]. Available: http://www.edweek.org/context/topics/choice.htm

Erickson, D.A. (1982). *Disturbing evidence about the "one best system"*. In R.B. Everhart, Ed., *The public school monopoly*. Cambridge, MA: Ballinger Publishing.

Glass, G. V., Cahen, L. S., Smith, M. L. and Filby, N. (1982). *School class size: Research and policy*. Beverly Hills, CA: Sage.

Goldring E. and Smrekar, C. (2000). Magnet Schools and the Pursuit of Racial Balance. *Education and Urban Society*, Vol. 33. No. 1, November, pp.17-35.

Hausman, C. S., and Goldring, E. (2000). Parent Involvement, Influence, and Satisfaction in Magnet Schools: Do Reasons for Choice Matter? *The Urban Review*, Vol. 32, No. 2, June, pp.105-21.

Hoxby, C. M. (1998). *When Parents Can Choose, What Do They Choose? The Effects of School Choice on Curriculum and Atmosphere*, in *When Schools Make a Difference*, Mayer, S. and Peterson, P. eds., Washington, D.C.: The Brookings Institution Press.

Ingels, S.J., Curtin, T.R., Kaufman, P., Alt, M.N., and Chen, X. (2002). *Coming of Age in the 1990s: The Eighth-Grade Class of 1988 12 Years Later*. NCES 2002-321. U.S. Department of Education, National Center for Education Statistics. Washington, DC.

Kalton, G. and Kasprzyk, D. (1986). The Treatment of Missing Data. Survey Methodology, No. 12, 1-16.

Kim, J. and Mueller, C.W. (1978). *Factor Analysis: Statistical Methods and Practical Issues*. Newbury Park CA: Sage Publications.

Klicka, C. J. (2001). Homeschooling in the United States: A Legal Analysis [on-line] available at http://www.hslda.org/laws.

Ladd, H. F. & Hansen, J. S. eds. (1999). *Making Money Matter: Financing America's Schools*. Committee on Education Finance, National Research Council. Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Nelson, B., Berman, P., Ericson, J. Kamprath, N., Perry, R., Silverman, D., Soloman, D. (2000). *The State of Charter Schools 2000: Fourth-Year Report*. U.S. Department of Education. Washington, DC.

Nolin, M. J., Montaquila, J., Nicchitta, P., Kim, K., Kleiner, B., Lennon, J., Chapman, C., Creighton, S., and Bielick, S. (2000a). *National Household Education Survey of 1999: Methodology Report* (NCES 2000-078). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Nolin, M. J., Montaquila, J. Lennon, J., Kliener, B., Kim, K, Chapman, C., Chandler, K., Creighton, S., and Bielick, S. (2000b). *National Household Education Survey of 1999: Data File User's Manual, Volume I* and *Volume II: Parent InterviewData File*, (NCES 2000-081). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Nord, C. W., Brimhall, D., and West, J. (1997). *Father's Involvement in Their Children's Schools*, NCES 98-091. U.S. Department of Education, National Center for Education Statistics. Washington, DC.

Ogawa, R. T. and Dutton, J. S. (1997). *Parent Involvement and School Choice: Exit and Voice in Public Schools*. Urban Education, Vol. 32 No. 3, pp. 333-353.

Schulte, B. (2002). Voters Protective of Public Schools, Wary of Vouchers. *The Washington Post*, June 28, pg. A11.

Tribe, L. (2000). *American Constitutional Law*. Mineola, NY: Foundation Press.

U.S. Census Bureau. (2001). *Current Population Survey. Historical Tables, Table A-1. School Enrollment of the Population 3 to 34 Years Old, by Level and Control of School, Race, and Hispanic Origin: October 1955 to 2000* (June 1, Internet Release),

U.S. Department of Education. National Center for Education Statistics. (2001). *Digest of Education Statistics: 2000*. NCES 2001-034. Washington, DC.

U.S. Department of Education. (2000a). *State Regulation of Private Schools*. June 2000. Washington, DC.

U.S. Department of Education. National Center for Education Statistics. (2000b). *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 1997-98*. NCES 2000-348. Washington, DC.

U.S. Department of Education. National Center for Education Statistics. (2000c). *Digest of Education Statistics: 1999*. NCES 2000-031. Washington, DC.

U.S. Department of Education. National Center for Education Statistics. (1999). *The Condition of Education 1999*. NCES 1999-022. Washington, DC: U.S. Government Printing Office.

U.S. Department of Education. National Center for Education Statistics. (1996a). *Public School Choice Programs, 1993-94: Availability and Student Participation*. NCES 97-909. Washington, DC.

U.S. Department of Education. National Center for Education Statistics. (1996b). *National Longitudinal Study: 1998-1994, Descriptive Summary Report*. NCES 96-175. Washington, DC.

U.S. Department of Education. National Center for Education Statistics. (1995). *Use of School Choice*. NCES 95-742R. Washington, DC.

Vaden-Kiernan, N. & Chandler, K. (1996). *Parents' Reports of School Practices to Involve Families*. U.S. Department of Education, National Center for Education Statistics. NCES 97-327. Washington, DC.

The Washington Post. (2003). *Nation in Brief: Colo. Governor Approves School Voucher Program*, April 17, pg. A24

Appendix A
Tables of Numbers

Table A1.— Number of students in grades 1–12 attending public and private schools, by student and household characteristics: 1993, 1996, and 1999

Student and household characteristics	1993		1996		1999	
	Number	s.e.	Number	s.e.	Number	s.e.
Number of students (thousands)	**42,385**	**52**	**45,526**	**63**	**47,190**	**69**
School type						
Public, assigned	33,870	165	34,603	231	35,826	207
Public, chosen	4,669	151	6,228	182	6,840	165
Private, church-related	3,184	126	36,454	126	3,423	124
Private, not church-related	662	49	1,040	67	1,101	64
Grade level						
Grades 1–5	18,507	49	19,871	34	20,326	45
Grades 6–8	11,022	4	11,495	25	11,611	28
Grades 9–12	12,856	24	14,161	36	15,253	34
Race/ethnicity						
White, non-Hispanic	29,308	93	30,684	140	30,418	179
Black, non-Hispanic	6,668	45	7,166	84	7,705	101
Hispanic	4,786	28	5,755	82	6,631	85
Other, non-Hispanic	1,623	81	1,920	86	2,436	115
Sex						
Male	21,490	253	23,570	249	24,070	217
Female	20,895	245	21,956	248	23,119	213
Disability status						
Has a disability	—		—		10,124	216
Does not have a disability	—		—		37,065	228
Household income						
$10,000 or less	6,215	49	6,476	90	5,806	111
10,001–20,000	7,062	108	6,220	145	6,026	135
20,001–35,000	10,606	180	10,158	182	9,934	187
35,001–50,000	8,117	172	8,656	143	8,258	187
50,001–75,000	6,202	172	7,579	166	8,086	194
More than $75,000	4,183	135	6,436	165	9,079	204
Parents highest level of education						
Less than high school diploma	3,941	165	4,476	149	4,301	152
High school diploma or GED	13,972	253	13,886	212	13,131	211
Some college/vocational/technical	13,433	202	13,591	229	14,215	217
Bachelor's degree	5,092	117	6,996	176	7,723	166
Graduate/professional school	5,947	132	6,577	163	7,820	183
Family structure						
Two parents	29,614	209	31,358	204	30,734	205
One parent	11,366	187	12,530	197	14,764	200
Non-parent guardians	1,406	112	1,638	106	1,691	85
Region						
Northeast	7,853	41	9,253	77	9,594	106
South	14,935	48	15,829	102	16,272	125
Midwest	10,282	48	10,788	92	11,505	132
West	9,315	42	9,656	76	9,819	106
Urbanicity						
Urban, inside urban area	25,626	371	27,577	216	29,245	193
Urban, outside urban area	6,194	208	6,250	184	5,911	187
Rural	10,565	335	11,699	92	12,033	129

— Not available.

NOTE: s.e. is standard error. Includes homeschooled students enrolled in public or private schools for 9 or more hours per week.

SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and Parent Survey of the NHES, 1999.

Table A2.— Number of students in grades 3–12, attending public and private schools, by school type: 1993, 1996, and 1999 (in thousands)

School type	1993		1996		1999	
	Number	s.e.	Number	s.e.	Number	s.e.
Public, assigned	28,050	147	28,604	212	29,596	187
Public, chosen	3,810	149	4,947	163	5,481	152
Private, church-related	2,550	118	2,824	111	2,730	105
Private, not church-related	534	47	847	59	880	62

— Not available.

NOTE: s.e. is standard error. Includes homeschooled students enrolled in public or private schools for 9 or more hours per week.

SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and Parent Survey of the NHES, 1999.

Table A3.— Number of students in grades 1–12, ages 5–17, attending public and private schools and homeschool by student and household characteristics: 1999

Student and household characteristics	1999	
	Number	s.e.
Number of students (thousands)	**46,380**	**70**
School type		
Public, assigned	34,661	207
Public, chosen	6,573	169
Private, church-related	3,349	125
Private, not church-related	1,068	64
Homeschooled	729	69
Grade level		
Grades 1–5	20,638	6
Grades 6–8	11,788	3
Grades 9–12	13,954	70
Race/ethnicity		
White, non-Hispanic	30,031	177
Black, non-Hispanic	7,484	105
Hispanic	6,466	86
Other, non-Hispanic	2,400	111
Sex		
Male	23,547	225
Female	22,833	228
Disability status		
Has a disability	9,871	220
Does not have a disability	36,509	219
Household income		
$10,000 or less	5,648	115
10,001–20,000	5,933	139
20,001–35,000	9,737	186
35,001–50,000	8,141	182
50,001–75,000	7,977	185
More than $75,000	8,945	204
Parents highest level of education		
Less than high school diploma	4,134	154
High school diploma or GED	12,835	192
Some college/vocational/technical	13,957	214
Bachelor's degree	7,656	177
Graduate/professional school	7,798	192
Family structure		
Two parents	30,386	198
One parent	14,338	201
Non-parent guardians	1,656	87
Region		
Northeast	9,450	108
South	16,016	131
Midwest	11,164	130
West	9,750	102
Urbanicity		
Urban, inside urban area	28,770	195
Urban, outside urban area	5,753	181
Rural	11,857	126

NOTE: s.e. is standard error. Includes homeschooled students enrolled in public or private schools for 9 or more hours per week.

SOURCE: U.S Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

Table A4.— Number of students in grades 6–12, attending public and private schools and by school type: 1993, 1996, and 1999 (in thousands)

School type	1993		1996		1999	
	Number	s.e.	Number	s.e.	Number	s.e.
Public, assigned	19,319	120	19,875	157	20,853	46
Public, chosen	2,523	125	3,280	121	3,732	154
Private, church-related	1,645	105	1,888	87	1,681	128
Private, not church-related	392	40	613	48	598	81

— Not available.

NOTE: s.e. is standard error. Includes homeschooled students enrolled in public or private schools for 9 or more hours per week.

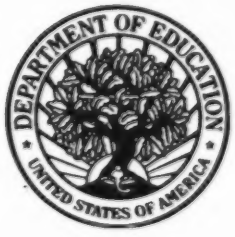
SOURCE: U.S Department of Education, National Center for Education Statistics, School Readiness Survey of the National Household Education Surveys Program (NHES), 1993, School Safety and Discipline Survey of the NHES, 1993, Parent & Family Involvement Survey of the NHES, 1996, and Parent Survey of the NHES, 1999.

ISBN 0-16-051443-6

U.S. Department of Education
ED Pubs
8242-B Sandy Court
Jessup, MD 20794-1398

Official Business
Penalty for Private Use, $300

U.S. POSTAGE PAID
U.S. DEPARTMENT
OF EDUCATION
PERMIT NO. G-17



BEST COPY AVAILABLE

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

	This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
X	This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").